

West Virginia Department of Environmental Protection

Joe Manchin, III
Governor

Division of Air Quality

Stephanie R. Timmermeyer
Cabinet Secretary

Permit to Operate



*Pursuant to
Title V
of the Clean Air Act*

Issued to:
M & G Polymers, USA, LLC
Apple Grove
R30-05300054-2005

*John A. Benedict
Director*

*Issued: September 27, 2005 • Effective: October 11, 2005
Expiration: September 27, 2010 • Renewal: March 27, 2010*

Permit Number: **R30-05300054-2005**

Permittee: **M & G Polymers, USA, LLC**

Facility Name: **Apple Grove**

Mailing Address: **State Route 2, Apple Grove, WV 25502-0088**

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location:	Apple Grove, Mason County, West Virginia
Mailing Address:	State Route 2, Apple Grove, WV 25502-0088
Telephone Number:	(304) 576-4410
Type of Business Entity:	LLC
Facility Description:	Manufacturer of polyester resin
SIC Codes:	2821
UTM Coordinates:	397.861 km Easting • 4,279.973 km Northing • Zone 17

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

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1.0. Emission Units

Emission Point ID	Control Device	Emission Unit ID	Emission Unit Description	Design Capacity	Year Installed
CP3					
3P-1020	C3S-M-1060 Baghouse	C3H-F-1010	CP3 TPA Surge Silo	7,175 ft³	1994
3P-4020	C3H-F-4020 Seal Pot	C3H-F-3010	CP3 Slurry Mix Tank	607 ft³	2001
		C3H-F-4010	CP3 Slurry Feed Tank	1,319 ft³	2001
3P-2002	C3S-M-2090 Baghouse	C3H-F-2010	CP3 IPA Surge Silo	3,530 ft³	1991
3P-3130	C4S-M-3130 Baghouse	C4S-F-3010	CP3 Recycle Surge Bin	1,170 ft ³	1994
3P-3190	None	C3L-F-3190	CP3 DEG Charge Tank	275 Gallons	1994
3P-155	None	D-155	CP3/CP4 MACT Tank	10,000 Gallons	2001
3P-1070	None	C3L-F-1070	CP3 Recupic EG Tank	12,700 Gallons	1994
3P-1071	None	C3L-F-1071	CP3 Recupic EG Tank	12,700 Gallons	1994
3P-1072	None	C3L-F-1072	CP3 Recupic EG Tank	12,700 Gallons	1994
3P-1032	None	C3L-F-3180	CP3 R/1 Recupic EG Charge Tank	1,730 Gallons	1994
		C3L-F-3140	CP3 R/1 EG Charge Tank	1,730 Gallons	1994
		C3L-F-3150	CP3 R/2 EG Charge Tank	275 Gallons	1994
3P-7020	C3L-F-7020 Seal Pot	C3L-F-6010	CP3/ CP4 Catalyst Mix Tank	455 ft ³	2001
		C3L-F-6510	CP3 Catalyst Mix Tank	455 ft³	2009
		C3L-F-7010	CP3/CP4 Catalyst Feed Tank	455 ft ³	2001
		C3L-F-8010	CP3/CP4 Toner Make-Up Tank	277 ft ³	2001
		C3L-F-9010	CP3/CP4 Toner Charge Tank	277 ft ³	2001
3P-2570	None	C3L-F-2570	CP3 Catalyst Slurry Tank	516 Gallons	1994
3P-2580	None	C3L-F-2580	CP3 Catalyst Slurry Tank	516 Gallons	1994
3P-8	None	UTG-F-3020	CP3 EG Storage Tank	675,000 Gallons	1966

Emission Point ID	Control Device	Emission Unit ID	Emission Unit Description	Design Capacity	Year Installed
3P-9	None	UTG-F-3010	CP3 EG Storage Tank	675,000 Gallons	1966
3P-0430	None	C3L-F-0430	CP3 EG Feed Tank	275 Gallons	1994
3P-1120	None	C3L-F-1120	CP3/CP4 Recupic EG Dump Tank	5,000 Gallons	1994
3P-1210	None	C38-E-1210	CP3 Pellet Dryers	12,500 pph	1994
3P-3210	None	C38-E-3210	CP3 Pellet Dryers	12,500 pph	1994
3P-5210	None	C38-E-5210	CP3 Pellet Dryers	12,500 pph	1994
3P-7210	None	C38-E-7210	CP3 Pellet Dryers	12,500 pph	2007
3P-0200	L4A-M-0200 Baghouse	L4A-F-0200	CP3 Off Spec Silo	8' x 32' s/s	1994
3P-0650	None	C3T-F-0650	CP3 Condensate Holding Tank	58 ft ³	1994
3P-1730	None	C3U-F-1730	CP3 R/3 TEG Bath	8" x 30" t/t	1994
3P-1900	None	C3T-F-1900	CP3 Refrigerant Surge Tank	955 Gallons	1994
3P-4620	None	C3T-F-4620	CP3 Condensed Dowtherm Receiver	116 Gallons	1994
3P-7260	None	C3T-F-7260	CP3 Hot Oil Storage Tank	17,700 Gallons	1994
3P-1600	C3T-B-1600 Hot Oil Heater	C3L-F-2220	CP3 Colorant Make-Up Tank	400 Gallons	1994
		C3L-F-2201	CP3 Colorant Charge Tank	400 Gallons	1994
		C3L-F-3160	CP3 Stabilizer Charge Tank	275 Gallons	1994
		C3L-F-4211	CP3/CP4 Stabilizer Make-Up Tank	400 Gallons	1994
		C3L-F-4100	CP3/CP4 Stabilizer Surge Tank	516 Gallons	1994
		C3L-F-4210	CP3/CP4 Stabilizer Make-Up Tank	400 Gallons	1994
		C3L-F-5040	CP3/CP4 Stabilizer Make-Up Tank	486 Gallons	1994
		F-3010	CP3 Slurry Mix Tank	607 ft³	2001
		F-4010	CP3 Slurry Feed Tank	1,319 ft³	2001
		C31-E-1020	CP3 R/1 System	2,970 Gallons	1994
		C32-E-1050	CP3 R/2 System	2,970 Gallons	1994

Emission Point ID	Control Device	Emission Unit ID	Emission Unit Description	Design Capacity	Year Installed
3P-1600	C3T-B-1600 Hot Oil Heater	C33-F-2250	CP3 R/3 System	2,517 Gallons	1994
		C33-F-5010	CP3 R/3 bis System	2,970 Gallons	2001
		C34-F-3280	CP3 R/4 System	1,700 pph	1994
		C31-F-1220	CP3 R/1 & R/2 Condensate Tank	7,383 pph	1994
		C33-F-2260	CP3 R/3 Condensate Tank	679 gpm	1994
		C34-F-2290	CP3 R/4 Condensate Tank	459 gpm	1994
		C34-F-8290	CP3 R/4B Condensate Tank	744 gpm	2007
		C34-F-9280	CP3 R/4B System	7,502 pph	2007
		C3T-F-0600	Knock Out Pot	N/A	1994
		C3H-F-4020	Seal Pot	N/A	1994
3P-1700	None	C3T-F-1700	Hot Oil Heater	23.0 MMBTU/hr	1994

CP4

4P-1020	C4S-M-1040 Baghouse	C4S-F-1020	CP4 TPA Surge Silo	178 ft ³	1996
4P-2100	C4S-M-2100 Baghouse	C4S-F-2050	CP4 IPA Surge Silo	8' x 18' t/s	1996
4P-3130	C4S-M-3140 Baghouse	C4S-F-3080	CP4 Recycle Surge Bin	1,170 ft ³	1999
4P-3190	None	C4L-F-3190	CP4 DEG Charge Tank	275 Gallons	1996
4P-1070	None	C4L-A-1070	CP4 Recupic EG Tank	12,700 Gallons	1996
4P-1071	None	C4L-A-1071	CP4 Recupic EG Tank	12,700 Gallons	1996
4P-1072	None	C4L-A-1072	CP4 Recupic EG Tank	12,700 Gallons	1996
4P-1800	None	C4L-F-1800	CP4 EG Storage Tank	675,000 Gallons	1996
4P-0430	None	C4L-F-0430	CP4 EG Feed Tank	275 Gallons	1996
4P-1032	None	C4L-F-3140	CP4 R/1 EG Charge Tank	1,742 Gallons	1996
		C4L-F-3180	CP4 R/1 Recupic EG Charge Tank	1,742 Gallons	1996

Emission Point ID	Control Device	Emission Unit ID	Emission Unit Description	Design Capacity	Year Installed
4P-1900	None	C4R-F-1900	CP4 Refrigerant Surge Tank	955 Gallons	1996
4P-4620	None	C4T-F-4620	CP4 Condensed Dowtherm Receiver	125 Gallons	1996
4P-1210	None	C48-E-1210	CP4 Pellet Dryers	13,000 pph	1996
4P-3210	None	C48-E-3210	CP4 Pellet Dryers	13,000 pph	1996
4P-5210	None	C48-E-5210	CP4 Pellet Dryers	13,000 pph	1996
4P-0340	C4A-M-0340 Baghouse	C4A-F-0410	CP4/CSS-12/CSS-13 Crystallizer Blending Silo	3,500 ft ³	1994
4P-0200	L4B-M-0200 Baghouse	L4B-F-0200	CP4 Off Spec Silo	8' x 32' s/s	1996
4P-4120	None	L24-M-4120	CP4 Pellet Filter Receiver	318 ft ²	1993
4P-1730	None	C4U-F-1710	CP4 R/4 TEG Bath	32" x 60" t/t	1996
4P-1296	None	C4Q-A-1296	CP4 Extruder	1,550 pph	2004
4P-4220	C4Q-M-4140/ C4Q-M-4220 Baghouses	C4Q-F-1290	CP4 Feed Hopper System	0.75 m ³	2004
4P-4180	C4Q-M-4190 Baghouse	C4Q-F-2290	CP4 Feed Hopper System	0.75 m ³	2004
4P-4160	C4Q-M-4160 Baghouse	C4Q-F-3290	CP4 Feed Hopper System	0.75 m ³	2004
4P-1600	C4T-B-1600 Hot Oil Heater	C4L-F-3160	CP4 Stabilizer Charge Tank	275 Gallons	1996
		C4L-F-2120	CP4 Catalyst Charge Tank	275 Gallons	1996
		C4L-F-3170	CP4 Catalyst Charge Tank	830 Gallons	1996
		C41-E-3020	CP4 R/1 System	2,970 Gallons	1996
		C42-E-2050	CP4 R/2 System	2,970 Gallons	1996
		C43-E-3250	CP4 R/3 System	2,970 Gallons	1996
		C44-E-3280	CP4 R/4 System	26,000 Gallons	1996
		C41-F-3220	CP4 R/1 & R/2 Separator	90 Gallons	1996

Emission Point ID	Control Device	Emission Unit ID	Emission Unit Description	Design Capacity	Year Installed
		C43-F-2260	CP4 R/3 Condensate Tank	1,660 Gallons	1996
		C44-F-2290	CP4 R/4 Condensate Tank	1,660 Gallons	1996
		C4L-F-2200	Catalyst Make-Up Tank	400 Gallons	1994
		C4L-F-5980	Make-Up Tank	533 Gallons	1994
		C4Q-A-1297	CP4 Extruder	2,800 lb/hr	2007
P-7640	None	F-7640	CP4 Hot Oil Storage Tank	16,725 Gallons	1996
4P-2002	C4Q-M-2002	C4Q-F-5000	CP4 Feed Hopper System	0.75 m³	2007
4P-0001	C4Q-M-0001 C4Q-F-0001	C4Q-F-5010	CP4 Feed B	530 ft³	2007
CSS-7					
7P-2601	C2A-M-2601 Baghouse	C2A-F-5410	CSS-7 Crystallizer Surge Bin	3,500 ft ³	1988
7P-2609	C2A-M-5350 Baghouse	C2A-E-5240/ C2A-B-5010	CSS-7 Crystallizer and Heater	9,000 pph/ 1.4 MM Btu/hr	1988
		C2B-B-7020/ C2B-E-5250	CSS-7 Preheater and Heater	9,000 pph/ 1.48 MMBtu/hr	1988
7P-0520	C2D-M-0520 Baghouse	C2D-E-5280	CSS-7 Product Cooler	14,156 acfm	1988
7P-0607	L36-M-0607 Baghouse	L36-F-6040	CSS-7 Box & Bagging Blender	85 ft ²	1988
7EC-15	L21-M-1050 Baghouse	L21-F-1020	CSS-7 Off-Spec Silo A	4,000 ft ³	1988
7P-1510	L22-M-2120 Baghouse	L22-F-2040	CSS-7 Off-Spec Silo B	85 ft ²	1987
7P-4227A	L14-M-4070 Baghouse	L14-F-4070	CSS-7 Product Storage Silo	4,000 ft ³	1987
7P-4227B	L14-M-4080 Baghouse	L14-F-4080	CSS-7 Product Storage Silo	4,000 ft ³	1987
7P-0430	None	L14-U-4030	CSS-7 Fines Elutriator	150 ft ²	1990

Emission Point ID	Control Device	Emission Unit ID	Emission Unit Description	Design Capacity	Year Installed
7P-2660	None	L14-F-2660	CSS-7/CSS-8 T-66 Dump Tank	116 Gallons	1994
7P-9002	None	L14-F-9001	CSS-7 Hot Oil Storage Tank	17,700 Gallons	1988
2P-9001	M-2603 Baghouse C2T-B-9001 Hot Oil Heater	C2B-F-5420	CSS-7 Preheater Surge Bin	943 ft³	1988
		C2B-M-5040	CSS-7 Surge Bin Filter	1,200 acfm	1988
		C2C-R-5060	CSS-7 R/6 Reactor	1,958 ft³	1988
CSS-8					
8E-02	S8A-M-2390 Baghouse	S8A-F-2430	CSS-8 Crystallizer Surge Bin	1,244 ft³	1991
8E-03	S8A-M-3350 Baghouse	S8A-E-3240/ S8A-B-3010	CSS-8 Crystallizer and Heater	68.4 ft²/ 2.152 MMBtu/hr	1991
8E-04	S8B-M-2420 Baghouse	S8B-E-2250/ S8B-B-2020	CSS-8 Preheater and Heater	27.7 ft²/ 0.977 MMBtu/hr	1991
8E-05	S8D-M-1520 Baghouse	S8D-E-1280	CSS-8 Product Cooler	40,000 18,000 pph	1991
8E-06	S8A-M-1590 Baghouse	S8A-M-1610	CSS-8 Refeed Cyclone	45,000 pph 1,000 ft³	1991
		S8E-F-1440	CSS-8 Verification Bin	4,000 ft³ 18,000 pph	1991
None	None	S8E-F-1450	CSS-8 Product Dense Phase Tank	50 ft³	1988
8E-08	L37-M-7130 Baghouse	L37-F-7050	CSS-8 Boxing Silo	1,200 ft³	1991
8E-09	None	L37-P-7130	CSS- 8 Storage Air Classifier	49-55 lb/ft³	1991
		L37-M-7150	CSS-8 Fines Elutriator	700 acfm	1991
8EP-204A	L12-M-2030 Baghouse	L12-F-2030	CSS-8 Product Silo	85 ft²	1987
8EP-204B	L12-M-2040 Baghouse	L12-F-2040	CSS-8 Product Silo	85 ft²	1987
8P-4127A	L13-M-3050 Baghouse	L13-F-3050	CSS-8 Product Silo	4,000 ft³	1987

Emission Point ID	Control Device	Emission Unit ID	Emission Unit Description	Design Capacity	Year Installed
8P-4127B	L13-M-3060 Baghouse	L13-F-3060	CSS-8 Product Silo	4,000 ft³	1987
8ECS4	L11-M-1010 Baghouse	L11-F-1010	CSS-8/CSS-9 Salvage Silo	4,000 ft³	1977
8ECS5	L11-M-1020 Baghouse	L11-F-1020	CSS-8 Salvage Silo	4,000 ft³	1977
8E-12	None	L13-M-3020	CSS-8 Pellet Filter Receiver	25,500 acfm	1991
8P-1030	None	L11-U-1030	CSS-8 Fines Elutriator	150 ft²	1991
8P-1050	None	L13-U-3030	CSS-8 Fines Elutriator	150 ft²	1991
8EP-208	None	L12-M-4030	CSS-8 Fines Elutriator	150 ft²	1991
7P-2660	N/A	L14-F-2660	T-66 Dump Tank	116 gallons	1988
7P-9002	N/A	L14-F-9001	Hot Oil Storage	17,700 gallons	1991
2P-9001	C2T-B-9001 Hot Oil Heater	S8A-E-1420	CSS-8 Preheater Surge Bin	930 ft³	1991
		S8C-R-1060/ S8C-R-3070	CSS-8 Reactor	2,404 ft³	1991
		C2T-F-2670	T-66 Lites Tank	6,400 gallons	1994
		C2T-F-5660	Knockout Drum	55 gallons	1994
		F-5001	T-66 Tank		Existing/2009
CSS-9					
9P-1701A	L15-M-1701A Baghouse	L15-F-1701A	CSS-9 Verification Bin	920 ft³	1988
9P-1701B	L15-M-1701B Baghouse	L15-F-1701B	CSS-9 Verification Bin	920 ft³	1988
9P-5091	None	L15-U-5090	CSS-9 Fines Elutriator	150 ft²	1991
9P-2701A	L15-M-2701A Baghouse	L15-F-2701A	CSS-9 Product Silo	4,000 ft³	1988
9P-2701B	L15-M-2701B Baghouse	L15-F-2701B	CSS-9 Product Silo	4,000 ft³	1988

Emission Point ID	Control Device	Emission Unit ID	Emission Unit Description	Design Capacity	Year Installed
9P-6110	None	L15-U-6110	CSS-9 Fines Elutriator	150 ft ²	1991
9E-10	L17-M-7230 Baghouse	L17-F-7130	CSS-9 Product Silo	4,000 ft ³	1991
		L17-F-7140	CSS-9 Product Silo	4,000 ft ³	1991
9E-11	None	L17-M-7240	CSS-9 Fines Elutriator	700 acfm	1991
9ECS5	L15-M-1020 Baghouse	L15-F-1020	CSS-9 Salvage Silo	4,000 ft ³	1977
9P-1030	None	L15-U-1030	CSS-9 Fines Elutriator	150 ft ²	1991
CSS-10					
10P-1340	C3A-M-1340 Baghouse	C3A-F-1410	CSS-10 Crystallizer Blending Silo	3,500 ft ³	1994
10P-2390	C3A-M-2390 Baghouse	C3A-F-2460	CSS-10 Crystallizer Surge Bin	1,570 ft ³	1994
10P-3350	C3A-M-3350 Baghouse	C3A-E-3240	CSS-10 Crystallizer and Heater	93.5 ft ² / 3.04 MMBtu/hr	1994
10P-2420	C3B-M-2420 Baghouse	C3B-E-2250	CSS-10 Preheater and Heater	27.7 ft ² / 0.977 MMBtu/hr	1994
10P-0520	C3D-M-0520 Baghouse	C3D-E-1280	CSS-10 Product Cooler	9,000 pph	1994
		C3D-E-5280	CSS-11 Product Cooler	27.7 ft ²	1994
10P-1590	C3E-M-1590 Baghouse	C3E-F-1440	CSS-10 Verification Bin	1,450 ft ³	1994
10P-1050	L3A-M-1050 Baghouse	L3A-F-1030	CSS-10/CSS-11 Box & Bagging Blender	1,200 ft ³	1994
10P-1100	None	L3A-M-1070	CSS-10 Fines Elutriator	150 ft ²	1994

Emission Point ID	Control Device	Emission Unit ID	Emission Unit Description	Design Capacity	Year Installed
10P-1130	L1A-M-1130 Baghouse	L1A-F-1090	CSS-10 Product Silo	4,000 ft ³	1994
		L1A-F-1100	CSS-10 Product Silo	4,000 ft ³	1994
10P-1140	None	L1A-M-1140	CSS-10 Fines Elutriator	150 ft ²	1994
3P-1600	C3B-M-1430 Baghouse	C3B-F-1420	CSS-10 Preheater Surge Bin	785 ft ³	1994
	C3T-B-1600 Hot Oil Heater				
	C3T-B-1600 Hot Oil Heater	C3C-R-1060	CSS-10 R/6 Reactors & Heater	2,404 ft ³	1994
CSS-11					
11P-6340	C3A-M-6340 Baghouse	C3A-F-5410	CSS-11 Crystallizer Blending Silo	3,500 ft ³	1994
11P-6390	C3A-M-6390 Baghouse	C3A-F-5460	CSS-11 Crystallizer Surge Bin	1,244 ft ³	1994
11P-7350	C3A-M-7350 Baghouse	C3A-E-7240	CSS-11 Crystallizer and Heater	93.5 ft ² / 3 MMBtu/hr	1994
11P-6420	C3B-M-6420 Baghouse	C3B-E-6250	CSS-11 Preheater and Heater	27.7 ft ² / 0.977 MMBtu/hr	1994
11P-5590	C3E-M-5590 Baghouse	C3E-F-5440	CSS-11 Verification Bin	1,450 ft ³	1994
11P-1090	L3B-M-2060 Baghouse	L3B-F-2040	CSS-11 Box and Bagging Blender	1,200 ft ³	1994
11P-1080	None	L3B-M-2080	CSS-11 Fines Elutriator	150 ft ²	1994
11P-1160	L1B-M-1160 Baghouse	L1B-F-2115	CSS-11 Product Silo	4,000 ft ³	1994
		L1B-F-2160	CSS-11 Product Silo	4,000 ft ³	1994
11P-2170	None	L1B-M-2170	CSS-11 Fines Elutriator	150 ft ²	1994

Emission Point ID	Control Device	Emission Unit ID	Emission Unit Description	Design Capacity	Year Installed
3P-1600	C3B-M-5430 Baghouse	C38-F-5420	CSS-11 Preheater Surge Bin	785 ft ³	1994
	C3T-B-1600 Hot Oil Heater				
	C3T-B-1600 Hot Oil Heater	C3C-R-5060	CSS-11 R/6 Reactors & Heater	2,404 ft ³	1994
CSS-12					
12P-2390	C4A-M-2390 Baghouse	C4A-F-2460	CSS-12 Crystallizer Surge Bin	1,570 ft ³	1996
12P-3350	C4A-M-3350 Baghouse	C4A-E-3240	CSS-12 Crystallizer & Heater	93.5 ft ² / 3.04 MMBtu/hr	1996
12P-2420	C4B-M-2420 Baghouse	C4B-E-2250	CSS-12 Preheater and Heater	43 ft ² / 0.97 MMBtu/hr	1996
12P-0520	C4D-M-0520 Baghouse	C4D-E-1280	CSS-12 Product Cooler	42.6 ft ²	1996
		C4D-E-5280	CSS-13 Product Cooler	42.6 ft ²	1996
12P-1590	C4E-M-1590 Baghouse	C4E-F-1440	CSS-12 Verification Bin	1,450 ft ³	1996
12P-1130	L1C-M-1130 Baghouse	L1C-F-1090	CSS-12 Product Silo	4,000 ft ³	1996
		L1C-F-1110	CSS-12 Product Silo	4,000 ft ³	1996
12P-1140	None	L1C-M-1140	CSS-12 Fines Elutriator	150 ft ²	1996
12P-0390	L4C-M-0390 Baghouse	L4C-F-0210	CSS-12/CSS-13 Salvage Silo	1,500 ft ²	1996
12P-2060	L3B-M-2060 Baghouse	L3B-F-2040	CSS-12/CSS-13 Boxing & Bagging Blender	1,200 ft ²	1996
12P-2080	None	L3B-M-2080	CSS-12 Fines Elutriator	150 ft ²	1996

Emission Point ID	Control Device	Emission Unit ID	Emission Unit Description	Design Capacity	Year Installed
4P-1600	C4B-M-1430 Baghouse	C4B-F-1420	CSS-12 Preheater Surge Bin	785 ft ²	1996
		C4C-R-3070	CSS-12 Reactor	2,110 ft ³	1996
	C4T-B-1600 Hot Oil Heater	C4C-R-1060 C4C-E-2320	CSS-12 Reactor & Reheater	1,958 ft ³	1996

CSS-13

13P-6390	C4A-M-6390 Baghouse	C4A-F-6460	CSS-13 Crystallizer Surge Bin	1,570 ft ³	1996
13P-7350	C4A-M-7350 Baghouse	C4A-E-7240	CSS-13 Crystallizer & Heater	93.5 ft ² / 3 MMBtu/hr	1996
12P-6420	C4B-M-6420 Baghouse	C4B-E-6250	CSS-13 Preheater & Heater	43 ft ² / 0.97 MMBtu/hr	1996
13P-5590	C4E-M-5590 Baghouse	C4E-F-5440	CSS-13 Verification Bin	1,450 ft ³	1996
13P-2080	None	C4E-M-2080	CSS-13 Fines Elutriator	150 ft ²	1996
13P-1130	L1C-M-1130 Baghouse	L1D-F-1110	CSS-13 Product Storage	4,000 ft ³	1996
		L1D-F-1120	CSS-13 Product Storage	4,000 ft ³	1996
13P-1170	None	L1D-M-1130	CSS-13 Fines Elutriator	150 ft ²	1996
4P-1600	C4B-M-5430 Baghouse	C4B-F-5420	CSS-13 Preheater Surge Bin	1,390 ft ³	1996
		E-7070	CSS-13 Reactor	2,110 ft ³	1996
	C4T-B-1600 Hot Oil Heater	C4C-R-5060 C4C-E-6320	CSS-13 Reactor & Reheater	1,958 ft ³	1996

Hot Oil Heaters

3P-1600	None	C3T-B-1600	Hot Oil Heater	33.5 MMBtu/hr	1994
4P-1600	None	C4T-B-1600	Hot Oil Heater	35 MMBtu/hr	1996
2P-9001	None	C2T-B-9001	Hot Oil Heater	24 MMBtu/hr	1988
3P-1700	None	C3T-F-1700	Hot Oil Heater	23.0 MMBtu/hr	2007

Emission Point ID	Control Device	Emission Unit ID	Emission Unit Description	Design Capacity	Year Installed
<i>Boilers and Heaters</i>					
U-B-2010	None	UGS-B-2010	WWTP Portable Boiler	4.19 MMBtu/hr	2009
U-B-3010	None	UGS-B-3010	Front Office Hot Water Boiler	0.9 MMBtu/hr	2009
U-B-3011	None	UGS-B-3011	Front Office Hot Water Boiler	0.9 MMBtu/hr	2009
U-B-4010	None	UGS-B-4010	CP-2 Ops Center Hot Water Boiler	1.6 MMBtu/hr	2009
U-B-4011	None	UGS-B-4011	CP-2 Ops Center Hot Water Boiler	1.6 MMBtu/hr	2009
U-B-1050	None	UGS-B-1050	D-155 Space Heater	0.26 MMBtu/hr	2009
U-B-1060	None	UGS-B-1060	D-155 Space Heater	0.26 MMBtu/hr	2009
U-B-1004	None	UGS-B-1004	Utility Space Heater	0.26 MMBtu/hr	2009
U-B-1005	None	UGS-B-1005	Utility Space Heater	0.26 MMBtu/hr	2009
U-B-1006	None	UGS-B-1006	Utility Space Heater	0.26 MMBtu/hr	2009
U-B-1007	None	UGS-B-1007	Utility Space Heater	0.26 MMBtu/hr	2009
U-B-4001	None	UGS-B-4001	CP-2 A/C Room Space Heater	0.26 MMBtu/hr	2009
U-B-4002	None	UGS-B-4002	CP-2 A/C Room Space Heater	0.26 MMBtu/hr	2009
U-B-4003	None	UGS-B-4003	Utility Space Heater	0.26 MMBtu/hr	2009
U-B-4004	None	UGS-B-4004	Utility Space Heater	0.26 MMBtu/hr	2009

Emission Point ID	Control Device	Emission Unit ID	Emission Unit Description	Design Capacity	Year Installed
<i>Boilers</i>					
C72	None	B-1010	#1 Boiler	80 MMBtu/hr	1967
C73	None	B-1020	#2 Boiler	60 MMBtu/hr	1965
	None	B-1030	#3 Boiler	60 MMBtu/hr	1965
C74	None	B-1040	#4 Boiler	30 MMBtu/hr	1963
<i>Warehouse</i>					
WF-6010	MWB-F-1080 Baghouse	L26-F-6010	Warehouse – West Silo	750 ft ³	1959
D56	None	NW11717	Warehouse Railcar Unloading System	NA	1976

2.0. General Conditions

2.1. Definitions

- 2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.2. Acronyms

CAAA	Clean Air Act Amendments	NSPS	New Source
CBI	Confidential Business Information		Performance Standards
CEM	Continuous Emission Monitor	PM	Particulate Matter
CES	Certified Emission Statement	PM₁₀	Particulate Matter less than 10µm in diameter
C.F.R. or CFR	Code of Federal Regulations		
CO	Carbon Monoxide	pph	Pounds per Hour
C.S.R. or CSR	Codes of State Rules	ppm	Parts per Million
DAQ	Division of Air Quality	PSD	Prevention of Significant Deterioration
DEP	Department of Environmental Protection	psi	Pounds per Square Inch
FOIA	Freedom of Information Act	SIC	Standard Industrial Classification
HAP	Hazardous Air Pollutant		
HON	Hazardous Organic NESHAP	SIP	State Implementation Plan
HP	Horsepower		
lbs/hr or lb/hr	Pounds per Hour	SO₂	Sulfur Dioxide
LDAR	Leak Detection and Repair	TAP	Toxic Air Pollutant
M	Thousand	TPY	Tons per Year
MACT	Maximum Achievable Control Technology	TRS	Total Reduced Sulfur
		TSP	Total Suspended Particulate
MM	Million		
MMBtu/hr or mmbtu/hr	Million British Thermal Units per Hour	USEPA	United States Environmental Protection Agency
MMCF/hr or mmcf/hr	Million Cubic Feet Burned per Hour	UTM	Universal Transverse Mercator
NA	Not Applicable		
NAAQS	National Ambient Air Quality Standards	VEE	Visual Emissions Evaluation
NESHAPS	National Emissions Standards for Hazardous Air Pollutants	VOC	Volatile Organic Compounds
NO_x	Nitrogen Oxides		

2.3. Permit Expiration and Renewal

- 2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.
[45CSR§30-5.1.b.]
- 2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.
[45CSR§30-4.1.a.3.]
- 2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.
[45CSR§30-6.3.b.]
- 2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.
[45CSR§30-6.3.c.]

2.4. Permit Actions

- 2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
[45CSR§30-5.1.f.3.]

2.5. Reopening for Cause

- 2.5.1. This permit shall be reopened and revised under any of the following circumstances:
- a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§30-6.6.a.1.A. or B.
 - b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.
 - c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
 - d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

- 2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.
[45CSR§30-6.4.]

2.7. Minor Permit Modifications

- 2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.
[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

- 2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.
[45CSR§30-6.5.b.]

2.9. Emissions Trading

- 2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.
[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

- 2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:
- a. The change must meet all applicable requirements and may not violate any existing permit term or condition.
 - b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
 - c. The change shall not qualify for the permit shield.
 - d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.
 - e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

- f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

[45CSR§30-5.9.]

2.11. Operational Flexibility

- 2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.

[45CSR§30-5.8]

- 2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.

[45CSR§30-5.8.a.]

- 2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

- a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or
- b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

- 2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

[45CSR§30-2.39]

2.12. Reasonably Anticipated Operating Scenarios

2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.

- a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.
- b. The permit shield shall extend to all terms and conditions under each such operating scenario; and
- c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

- a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution Control equipment), practices, or operations regulated or required under the permit;
- d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

- 2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:
- a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and
 - b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

- 2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

[45CSR§30-5.1.f.2.]

2.17. Emergency

- 2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

[45CSR§30-5.7.a.]

- 2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met.

[45CSR§30-5.7.b.]

- 2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. The permitted facility was at the time being properly operated;
- c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

- d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

- 2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

[45CSR§30-5.7.d.]

- 2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

[45CSR§30-5.7.e.]

2.18. Federally-Enforceable Requirements

- 2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.

[45CSR§30-5.2.a.]

- 2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

2.19. Duty to Provide Information

- 2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

- 2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

[45CSR§30-4.2.]

2.21. Permit Shield

- 2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.

[45CSR§30-5.6.a.]

- 2.21.2. Nothing in this permit shall alter or affect the following:

- a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or
- b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.
- c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§30-5.6.c.]

2.22. Credible Evidence

- 2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.

[45CSR§30-5.3.e.3.B. and 45CSR38]

2.23. Severability

- 2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.

[45CSR§30-5.1.e.]

2.24. Property Rights

- 2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege.

[45CSR§30-5.1.f.4]

2.25. Acid Deposition Control

- 2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.

- a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.
- b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.
- c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

- 2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.

[45CSR§30-5.1.a.2.]

3.0. Facility-Wide Requirements

3.1. Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person, firm, corporation, association or public agency is prohibited except as noted in 45CSR§6-3.1.
[45CSR§6-3.1.]
- 3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause, suffer, allow or permit any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). A copy of this notice is required to be sent to the USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health.
[40 C.F.R. 61 and 45CSR15]
- 3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1 State-Enforceable only.]
- 3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
[45CSR§11-5.2.]
- 3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality.
[W.Va. Code § 22-5-4(a)(14)]
- 3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.

- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.

[40 C.F.R. 82, Subpart F]

- 3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.

[40 C.F.R. 68]

- 3.1.9. **Permanent shutdown.** A source which has not operated at least 500 hours in one 12-month period within the previous five (5) year time period may be considered permanently shutdown, unless such source can provide to the Secretary, with reasonable specificity, information to the contrary. All permits may be modified or revoked and/or reapplication or application for new permits may be required for any source determined to be permanently shutdown.

[45CSR§13-10.5.]

- 3.1.10. **Boilers and Process Heaters.** If US EPA has not already promulgated a standard pursuant to 40 C.F.R. 63 for industrial, commercial, institutional boilers and process heaters, the facility shall submit a Part 1 112(j) “equivalent emission limitation by permit” application for case-by-case MACT determination, containing the information required in 40 C.F.R. §63.53(a), within thirty (30) days of the date for a final rule specified in the final order of the United States District Court for the District of Columbia, which is currently December 16, 2010. The Part 1 112(j) application shall identify each affected unit, and address HAP emissions from each of the boilers and process heaters. If the facility determines there are no affected units (boilers or process heaters), a statement of non-applicability must be submitted in lieu of a Part 1 application. A Part 2 112(j) “equivalent emission limitation by permit” application for case-by-case MACT determination containing information required in 40 C.F.R. §63.53(b) is due within 60 days of the Part 1 112(j) application submittal. All 112(j) “equivalent emission limitation by permit” applications must be submitted to both WVDEP-Division of Air Quality, and Chief of Permits and Technical Branch, US EPA Region III, Mail Code 3AP11, 1650 Arch Street, Philadelphia, PA, 19103-2029.

[45CSR34, 40 C.F.R. §63.52]

3.2. Monitoring Requirements

- 3.2.1. NA

3.3. Testing Requirements

- 3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

- a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.
- b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.
- c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

[WV Code § 22-5-4(a)(15) and 45CSR13.]

3.4. Recordkeeping Requirements

- 3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:
 - a. The date, place as defined in this permit and time of sampling or measurements;
 - b. The date(s) analyses were performed;
 - c. The company or entity that performed the analyses;
 - d. The analytical techniques or methods used;
 - e. The results of the analyses; and
 - f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A.; 45CSR13, R13-1650 ~~CK~~ and [R13-2807T](#), 4.4.1]

- 3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.

[45CSR§30-5.1.c.2.B.]

- 3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received. Such record shall contain an assessment of the validity of the complaints as well as any corrective actions taken. **[45CSR§30-5.1.c.]**

3.5. Reporting Requirements

- 3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete. **[45CSR§§30-4.4. and 5.1.c.3.D.]**
- 3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31. **[45CSR§30-5.1.c.3.E.]**
- 3.5.3. All notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, mailed first class or by private carrier with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Phone: 304/926-0475
FAX: 304/926-0478

If to the US EPA:

Associate Director
Office of Enforcement and Permits Review
(3AP12)
U. S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

- 3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. **[45CSR§30-8.]**
- 3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification. **[45CSR§30-5.3.e.]**
- 3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period

July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4.
[45CSR§30-5.1.c.3.A.]

3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.

3.5.8. **Deviations.**

- a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:
 1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.
 2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.
 3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.
 4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

- b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.

[45CSR§30-5.1.c.3.B.]

3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.

[45CSR§30-4.3.h.1.B.]

3.6. Compliance Plan

3.6.1. NA

3.7. Permit Shield

- 3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.
- 3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.
 - a. 40 C.F.R. 63, Subpart EEEE – “National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline). Table 1 constituents present are acetaldehyde, 1,4-dioxane, and ethylene glycol. Acetaldehyde and 1,4-dioxane are present only in impurity quantities in recupic. Those vessels containing recupic are already subject to 40 C.F.R. 63, Subpart JJJ, and according to 40 C.F.R. §63.2338(c)(1) are not subject to 40 C.F.R. 63, Subpart EEEE. Those sources containing ethylene glycol are not subject to 40 C.F.R. 63, Subpart EEEE because ethylene glycol has an annual average true vapor of less than 0.7 kilopascals (0.1 psia) and is therefore not defined as an organic liquid under 40 C.F.R. §63.2406.
 - b. 40 C.F.R.63, Subpart ZZZZ – “National Emission Standards for Hazardous Air Pollutants for Stationary Internal Combustion Engines.” M & G Polymers has two stationary reciprocating internal combustion engines. They are diesel firewater pumps with a rated horsepower of 235 hp each. According to 40 C.F.R. §63.6590, 40 C.F.R. 63, Subpart ZZZZ only applies to reciprocating internal combustion engines with a brake horsepower of greater than 500 hp.

4.0. CP3, CP4, CSS-7, CSS-8, CSS-9, CSS-10, CSS-11, CSS-12, and CSS-13 Requirements

4.1. Limitations and Standards

- 4.1.1. The facility shall be limited to the maximum production rates for each of the associated operating units as shown in the following table:

Table 4.1.1.

Unit	Production Rate	
	Hourly ¹ (pounds/hour)	Annual (tons/year)
CP-3	38,000 <u>70,000</u>	166,440 <u>306,600</u>
CP-4	36,000 <u>40,000</u>	157,680
CSS-7	26,000 <u>13,000</u>	113,880 <u>56,940</u>
CSS-8	45,000 <u>18,000</u>	65,700 <u>78,840</u>
CSS-9	32,000 <u>42,000</u>	140,160 <u>183,960</u>
CSS-10	36,000 <u>18,000</u>	157,680 <u>78,840</u>
CSS-11	36,000 <u>18,000</u>	157,680 <u>78,840</u>
CSS-12	36,000 <u>18,000</u>	157,680 <u>78,840</u>
CSS-13	36,000 <u>18,000</u>	157,680 <u>78,840</u>

1 – Hourly production limits are based on a maximum daily average rate.

[45CSR13, R13-1650~~**CK**~~ **and R13-2807T, 4.1.1]**

- 4.1.2. The Hot Oil Heater [C2T-B-9001] shall be operated in accordance to the following limits and requirements:
- The heater shall be limited to a maximum designed heat input rate of 24.0×10^6 Btu/hour.
 - Fuel consumption shall be limited to natural gas at a maximum rate of ~~25,000~~ 55,312 ft³/hour and ~~219~~ 278 x 10⁶ ft³/year.
 - The heater shall be designed and operated so to provide a minimum destruction efficiency of 99.8% for VOC's from sources vented to emission point 2P-9001, as established in Section 1.0 – Emission Units, of this permit.
 - Visible emissions from Emission Point 2P-9001 shall not exceed a maximum of 10% opacity on a 6-minute averaging period except as authorized per 45CSR§2-3.1.

[45CSR13, R13-1650~~**CK**~~ **and R13-2807T, 4.1.2]**

- 4.1.3. The Hot Oil Heaters [C3T-B-1600 and C4T-B-1600] shall be operated in accordance to the following limits and requirements:
- The heaters shall be limited to a maximum designed heat input rate of ~~33.5 x 10⁶~~ 53.1 x 10⁶ Btu/hour.

- b. Fuel consumption shall be limited to natural gas at a maximum rate of ~~34,896 ft³/hour and 305.7 x 10⁶ ft³/year~~ 55,312 ft³/hour and 411 x 10⁶ ft³/year.
- c. The heater shall be designed and operated so to provide a minimum destruction efficiency of 99.8% for VOC's from sources vented to emission point 3P-1600 and 4P-1600, as established in Section 1.0 – Emission Units, of this permit.
- d. Visible emissions from Emission Points 3P-1600 and 4P-1600 shall not exceed a maximum of 10% opacity on a 6-minute averaging period except as authorized per 45CSR§2-3.1.

[45CSR13, R13-1650 ~~CK~~ and R13-2807T, 4.1.3. and 4.1.4.]

- 4.1.4. The Hot Oil Heater [~~C4T-B-1600~~ C3T-F-1700] shall be operated in accordance to the following limits and requirements:
 - a. The heater shall be limited to a maximum designed heat input rate of ~~33.5 x 10⁶~~ 23.0 x 10⁶ Btu/hour.
 - b. Fuel consumption shall be limited to natural gas at a maximum rate of ~~36,459 ft³/hour and 319.4 x 10⁶ ft³/year~~ 24,000 ft³/hour and 210 x 10⁶ ft³/year.
 - ~~c. The heater shall be designed and operated so to provide a minimum destruction efficiency of 99.8% for VOC's from sources vented to emission point 4P-1600, as established in Section 1.0 – Emission Units, of this permit.~~
 - c. ~~4~~ Visible emissions from Emission Point ~~4P-1600~~ 3P-1700 shall not exceed a maximum of 10% opacity on a 6-minute averaging period except as authorized per 45CSR§2-3.1.

[45CSR13, R13-1650 ~~CK~~ and R13-2807T, 4.1.4. 4.1.5.]

- 4.1.5. Visible emissions from emission points servicing sources subject to 45CSR7 and emitting particulate matter shall not exceed a maximum of 20% opacity. **[45CSR13, R13-1650 ~~CK~~ and R13-2807T, 4.1.5 4.1.10]**
- 4.1.6. Emissions released from sources affected by this permit shall be limited to emission points, pollutants, and associated emission rates as established by ~~Table 4.1.6-~~ Tables 4.1.6.a through j.

Table 4.1.6. — Maximum Permitted Emissions

Emission Point ID	Control Device	Emission Unit ID	Emissions		
			Pollutants	Hourly (pounds/hour)	Annual (tons/year)
CP3					
3P-1020	C3S-M-1060 Baghouse	C3H-F-1010	PM	0.82	2.11
3P-4020	C3H-F-4020 Seal Pot	C3H-F-3010	VOC	0.72	3.1
		C3H-F-4010	Total HAPs	0.51	2.3
			Ethylene Glycol	0.27	1.2
			Acetaldehyde	0.23	1.0
			1,4-Dioxane	0.01	0.03
3P-2002	C3S-M-2090 Baghouse	C3H-F-2010	PM	0.07	0.01
3P-3130	C4S-M-3130 Baghouse	C4S-F-3010	PM	0.05	0.004
			VOC	0.39	1.72
			Total HAPs	0.37	1.64
			Ethylene Glycol	0.31	1.38

Emission Point ID	Control Device	Emission Unit ID	Emissions		
			Pollutants	Hourly (pounds/hour)	Annual (tons/year)
			Acetaldehyde	0.06	0.26
3P-3190	None	C3L-F-3190	VOC	0.001	0.001
			Ethylene Glycol	0.001	0.001
3P-155	None	D-155	VOC	0.001	0.001
			Total HAPs	0.002	0.002
			Ethylene Glycol	0.001	0.001
			Acetaldehyde	0.001	0.001
3P-1070	None	C3L-F-1070	VOC	0.003	0.007
			Total HAPs	0.003	0.007
			Ethylene Glycol	0.003	0.007
3P-1071	None	C3L-F-1071	VOC	0.003	0.007
			Total HAPs	0.003	0.007
			Ethylene Glycol	0.003	0.007
3P-1072	None	C3L-F-1072	VOC	0.003	0.007
			Total HAPs	0.003	0.007
			Ethylene Glycol	0.003	0.007
3P-1032	None	C3L-F-3180	VOC	0.1	0.21
		C3L-F-3140	Total HAPs	0.1	0.21
		C3L-F-3150	Ethylene Glycol	0.1	0.21
3P-7020	C3L-F-7020 Seal Pot	C3L-F-6010	VOC	0.24	0.17
		C3L-F-7010	Total HAPs	0.24	0.17
		C3L-F-8010	Ethylene Glycol	0.24	0.17
		C3L-F-9010			
3P-2570	None	C3L-F-2570	VOC	0.014	0.001
			Total HAPs	0.014	0.001
			Ethylene Glycol	0.014	0.001
3P-2580	None	C3L-F-2580	VOC	0.014	0.001
			Total HAPs	0.014	0.001
			Ethylene Glycol	0.014	0.001
3P-8	None	UTG-F-3020	VOC	0.011	0.05
			Total HAPs	0.011	0.05
			Ethylene Glycol	0.011	0.05
3P-9	None	UTG-F-3010	VOC	0.011	0.05
			Total HAPs	0.011	0.05
			Ethylene Glycol	0.011	0.05
3P-0430	None	C3L-F-0430	VOC	0.001	0.003
			Total HAPs	0.001	0.003
			Ethylene Glycol	0.001	0.003
3P-1120	None	C3L-F-1120	VOC	0.003	0.007
			Total HAPs	0.003	0.007
			Ethylene Glycol	0.003	0.007
3P-1210	None	C38-E-1210	VOC	0.2	0.8
			Total HAPs	0.103	0.54
			Ethylene Glycol	0.1	0.42
			Acetaldehyde	0.003	0.12
3P-3210	None	C38-E-3210	VOC	0.2	0.8
			Total HAPs	0.103	0.54
			Ethylene Glycol	0.1	0.42
			Acetaldehyde	0.003	0.12

Emission Point ID	Control Device	Emission Unit ID	Emissions		
			Pollutants	Hourly (pounds/hour)	Annual (tons/year)
3P-5210	None	C38-E-5210	VOC Total HAPs Ethylene Glycol Acetaldehyde	0.2 0.103 0.1 0.003	0.8 0.54 0.42 0.12
3P-0200	L4A-M-0200 Baghouse	L4A-F-0200	PM	0.19	0.004
3P-0650	None	C3T-F-0650	VOC Total HAPs Ethylene Glycol	0.001 0.001 0.001	0.001 0.001 0.001
3P-1730	None	C3U-F-1730	VOC	0.009	0.0012
3P-1900	None	C3T-F-1900	VOC	0.0024	0.001
3P-4620	None	C3T-F-4620	VOC Total HAPs Ethylene Glycol	0.001 0.001 0.001	0.001 0.001 0.001
3P-7260	None	C3T-F-7260	VOC	0.001	0.001
3P-1600	C3T-B-1600 Hot Oil Heater	C3L-F-2220	PM	0.11	0.5
		C3L-F-2201	CO	1.9	8.14
		C3L-F-3160	NO _x	3.2	14.0
		C3L-F-4211	SO ₂	0.053	0.23
		C3L-F-4100	VOC	0.47	1.22
		C3L-F-4210	Total HAPs	0.202	0.052
		C3L-F-5040	Ethylene Glycol	0.006	0.001
		C31-E-1020	Acetaldehyde	0.2	0.053
		C32-E-1050	1,4-Dioxane	0.001	0.001
		C33-F-2250			
		C33-F-5010			
		C34-F-3280			
		C31-F-1220			
		C33-F-2260			
		C34-F-2290			
CP4					
4P-1020	C4S-M-1040 Baghouse	C4S-F-1020	PM	0.1	0.41
4P-2100	C4S-M-2100 Baghouse	C4S-F-2050	PM	0.01	0.01
4P-3130	C4S-M-3140 Baghouse	C4S-F-3080	PM VOC Total HAPs Ethylene Glycol Acetaldehyde	0.05 0.4 0.4 0.31 0.06	0.0042 1.72 1.72 1.4 0.26
4P-3190	None	C4L-F-3190	VOC	0.001	0.001
4P-1070	None	C4L-A-1070	VOC Total HAPs Ethylene Glycol	0.02 0.02 0.02	0.09 0.09 0.09
4P-1071	None	C4L-A-1071	VOC Total HAPs Ethylene Glycol	0.02 0.02 0.02	0.09 0.09 0.09
4P-1072	None	C4L-A-1072	VOC Total HAPs	0.02 0.02	0.09 0.09

Emission Point ID	Control Device	Emission Unit ID	Emissions		
			Pollutants	Hourly (pounds/hour)	Annual (tons/year)
			Ethylene Glycol	0.02	0.09
4P-1800	None	C4L-F-1800	VOC	0.006	0.03
			Total HAPs	0.006	0.03
			Ethylene Glycol	0.006	0.03
4P-0430	None	C4L-F-0430	PM	0.001	0.001
4P-1032	None	C4L-F-3140	VOC	0.045	0.19
		C4L-F-3180	Total HAPs	0.045	0.19
			Ethylene Glycol	0.045	0.19
4P-1900	None	C4R-F-1900	VOC	0.002	0.001
			Total HAPs	0.002	0.001
			Ethylene Glycol	0.002	0.001
4P-4620	None	C4T-F-4620	VOC	0.001	0.001
4P-1210	None	C48-E-1210	VOC	0.12	0.51
			Total HAPs	0.08	0.34
			Ethylene Glycol	0.062	0.26
			Acetaldehyde	0.018	0.08
4P-3210	None	C48-E-3210	VOC	0.12	0.51
			Total HAPs	0.08	0.34
			Ethylene Glycol	0.062	0.26
			Acetaldehyde	0.018	0.08
4P-5210	None	C48-E-5210	VOC	0.12	0.51
			Total HAPs	0.08	0.34
			Ethylene Glycol	0.062	0.26
			Acetaldehyde	0.018	0.08
4P-0340	C4A-M-0340 Baghouse	C4A-F-0410	PM	0.03	0.003
4P-0200	L4B-M-0200 Baghouse	L4B-F-0200	PM	0.094	0.003
4P-4120	None	L24-M-4120	PM	0.0033	0.014
4P-1730	None	C4U-F-1710	VOC	0.001	0.001
4P-1296	None	C4Q-A-1296	PM	0.31	1.4
			SO ₂	1.07	4.7
			HCl	0.31	1.4
4P-4220	C4Q-M-4140/ C4Q-M-4220 Baghouses	C4Q-F-1290	PM	0.011	0.05
4P-4180	C4Q-M-4190 Baghouse	C4Q-F-2290	PM	0.014	0.06
4P-4160	C4Q-M-4160 Baghouse	C4Q-F-3290	PM	0.003	0.013
4P-1600	C4T-B-1600 Hot Oil Heater	C4L-F-3160	PM	0.72	0.3
		C4L-F-2120	CO	1.23	5.2
		C4L-F-3170	NO _x	2.1	8.8
		C41-E-3020	SO ₂	0.035	0.15
		C42-E-2050	VOC	0.22	0.93
		C43-E-3250	Total HAPs	0.046	0.19
		C44-E-3280	Ethylene Glycol	0.005	0.02
		C41-F-3220	Acetaldehyde	0.041	0.17

Emission Point ID	Control Device	Emission Unit ID	Emissions		
			Pollutants	Hourly (pounds/hour)	Annual (tons/year)
		C43-F-2260			
		C44-F-2290			
P-7640	None	F-7640	VOC	0.001	0.001

CSS-7					
7P-2601	C2A-M-2601 Baghouse	C2A-F-5410	PM	0.0014	0.001
7P-2609	C2A-M-5350 Baghouse	C2A-E-5240/ C2A-B-5010	PM	0.01	0.038
			CO	0.045	0.18
			NO _x	0.23	0.91
			SO ₂	0.0014	0.006
		C2B-B-7020/ C2B-E-5250	VOC	0.42	1.8
			Total HAPs	0.39	1.64
			Ethylene Glycol	0.26	1.1
7P-0520	C2D-M-0520 Baghouse	C2D-E-5280	Acetaldehyde	0.13	0.54
			PM	0.022	0.09
			VOC	0.14	0.57
			Total HAPs	0.124	0.474
7P-0607	L36-M-0607 Baghouse	L36-F-6040	Ethylene Glycol	0.12	0.46
			Acetaldehyde	0.004	0.014
			PM	0.002	0.001
			7EC-15	L21-M-1050 Baghouse	L21-F-1020
7P-1510	L22-M-2120 Baghouse	L22-F-2040	PM	0.001	0.004
7P-4227A	L14-M-4070 Baghouse	L14-F-4070	PM	0.001	0.001
7P-4227B	L14-M-4080 Baghouse	L14-F-4080	PM	0.001	0.001
7P-0430	None	L14-U-4030	PM	0.001	0.001
7P-2660	None	L14-F-2660	VOC	0.001	0.001
7P-9002	None	L14-F-9001	VOC	0.001	0.001
2P-9001	M-2603 Baghouse C2T-B-9001 Hot Oil Heater	C2B-F-5420	PM	0.04	0.16
		C2B-M-5040	CO	0.91	3.6
		C2C-R-5060	NO _x	1.7	6.7
			SO ₂	0.05	0.2
			VOC	0.09	0.38
			Total HAPs	0.07	0.27
			Ethylene Glycol	0.04	0.16
			Acetaldehyde	0.03	0.11
CSS-8					
8E-02	S8A-M-2390 Baghouse	S8A-F-2430	PM	0.0023	0.01
8E-03	S8A-M-3350 Baghouse	S8A-E-3240/ S8A-B-3010	PM	0.062	0.26
			CO	0.045	0.19
			NO _x	0.22	0.9

Emission Point ID	Control Device	Emission Unit ID	Emissions		
			Pollutants	Hourly (pounds/hour)	Annual (tons/year)
			SO ₂	0.001	0.006
			VOC	0.05	0.2
			Total HAPs	0.03	0.13
			Ethylene Glycol	0.03	0.13
8E-04	S8A-M-2420 Baghouse	S8B-E-2250/ S8B-B-2020	PM	0.037	0.15
			CO	0.02	0.09
			NO _x	0.1	0.4
			SO ₂	0.001	0.003
			VOC	0.07	0.29
			Total HAPs	0.062	0.26
			Ethylene Glycol	0.025	0.1
			Acetaldehyde	0.037	0.16
8E-05	S8D-M-1520 Baghouse	S8D-E-1280	PM	0.016	0.07
8E-06	S8A-M-1590 Baghouse	S8A-M-1610 S8E-F-1440	PM	0.0024	0.01
8E-08	L37-M-7130 Baghouse	L37-F-7050	PM	0.003	0.01
8E-09	None	L37-P-7130 L37-M-7150	PM	0.007	0.014
8EP-204A	L12-M-2030 Baghouse	L12-F-2030	PM	0.001	0.001
8EP-204B	L12-M-2040 Baghouse	L12-F-2040	PM	0.001	0.001
8P-4127A	L13-M-3050 Baghouse	L13-F-3050	PM	0.001	0.001
8P-4127B	L13-M-3060 Baghouse	L13-F-3060	PM	0.001	0.001
8ECS4	L11-M-1010 Baghouse	L11-F-1010	PM	0.012	0.05
8ECS5	L11-M-1020 Baghouse	L11-F-1020	PM	0.012	0.05
8E-12	None	L13-M-3020	PM	0.05	0.05
8P-1030	None	L11-U-1030	PM	0.001	0.04
8P-1050	None	L13-U-3030	PM	0.001	0.04
8EP-208	None	L12-M-4030	PM	0.004	0.02
CSS-9					
9P-1701A	L15-M-1701A Baghouse	L15-F-1701A	PM	0.001	0.003
9P-1701B	L15-M-1701B Baghouse	L15-F-1701B	PM	0.001	0.003
9P-5091	None	L15-U-5090	PM	0.002	0.009
9P-2701A	L15-M-2701A Baghouse	L15-F-2701A	PM	0.001	0.003
9P-2701B	L15-M-2701B Baghouse	L15-F-2701B	PM	0.001	0.003
9P-6110	None	L15-U-6110	PM	0.002	0.009
9E-10	L17-M-7230 Baghouse	L17-F-7130 L17-F-7140	PM	0.001	0.003

Emission Point ID	Control Device	Emission Unit ID	Emissions		
			Pollutants	Hourly (pounds/hour)	Annual (tons/year)
9E-11	None	L17-M-7240	PM	0.005	0.02
9ECS5	L15-M-1020 Baghouse	L15-F-1020	PM	0.012	0.05
9P-1030	None	L15-U-1030	PM	0.001	0.04
<i>CSS-10</i>					
10P-1340	C3A-M-1340 Baghouse	C3A-F-1410	PM	0.004	0.002
10P-2390	C3A-M-2390 Baghouse	C3A-F-2460	PM	0.001	0.005
10P-3350	C3A-M-3350 Baghouse	C3A-E-3240	PM CO NO_x SO₂ VOC Total HAPs Ethylene Glycol Acetaldehyde	0.032 0.13 0.65 0.004 1.53 0.36 0.3 0.06	0.032 0.13 0.65 0.004 1.53 1.48 1.25 0.23
10P-2420	C3B-M-2420 Baghouse	C3B-E-2250	PM CO NO_x SO₂ VOC Total HAPs Ethylene Glycol Acetaldehyde	0.004 0.013 0.07 0.001 0.24 0.21 0.08 0.13	0.032 0.06 0.28 0.002 1.0 0.87 0.34 0.53
10P-0520	C3D-M-0520 Baghouse	C3D-E-1280	PM VOC Total HAPs	0.014 0.19 0.155	0.06 0.8 0.64
		C3D-E-5280	Ethylene Glycol Acetaldehyde	0.15 0.005	0.62 0.02
10P-1590	C3E-M-1590 Baghouse	C3E-F-1440	PM	0.0013	0.005
10P-1050	L3A-M-1050 Baghouse	L3A-F-1030	PM	0.0011	0.001
10P-1100	None	L3A-M-1070	PM	0.001	0.004
10P-1130	L1A-M-1130 Baghouse	L1A-F-1090	PM	0.0011	0.001
		L1A-F-1100			
10P-1140	None	L1A-M-1140	PM	0.001	0.004
<i>CSS-11</i>					
11P-6340	C3A-M-6340 Baghouse	C3A-F-5410	PM	0.004	0.002
11P-6390	C3A-M-6390 Baghouse	C3A-F-5460	PM	0.0012	0.005
11P-7350	C3A-M-7350 Baghouse	C3A-E-7240	PM CO NO_x SO₂ VOC Total HAPs	0.061 0.03 0.15 0.001 0.37 0.36	0.026 0.13 0.65 0.004 1.53 1.48

Emission Point ID	Control Device	Emission Unit ID	Emissions		
			Pollutants	Hourly (pounds/hour)	Annual (tons/year)
			Ethylene Glycol Acetaldehyde	0.3 0.06	1.25 0.23
11P-6420	C3B-M-6420 Baghouse	C3B-E-6250	PM CO NO _x SO ₂ VOC Total HAPs Ethylene Glycol Acetaldehyde	0.004 0.013 0.07 0.001 0.24 0.21 0.08 0.13	0.017 0.06 0.28 0.002 1.01 0.87 0.34 0.53
11P-5590	C3E-M-5590 Baghouse	C3E-F-5440	PM	0.0013	0.005
11P-1090	L3B-M-2060 Baghouse	L3B-F-2040	PM	0.0011	0.001
11P-1080	None	L3B-M-2080	PM	0.001	0.004
11P-1160	L1B-M-1160 Baghouse	L1B-F-2115 L1B-F-2160	PM	0.003	0.001
11P-2170	None	L1B-M-2170	PM	0.001	0.004
<i>CSS-12</i>					
12P-2390	C4A-M-2390 Baghouse	C4A-F-2460	PM	0.002	0.008
12P-3350	C4A-M-3350 Baghouse	C4A-E-3240	PM CO NO _x SO ₂ VOC Total HAPs Ethylene Glycol Acetaldehyde	0.009 0.038 0.19 0.001 0.37 0.36 0.3 0.06	0.036 0.16 0.8 0.005 1.53 1.48 1.25 0.23
12P-2420	C4B-M-2420 Baghouse	C4B-E-2250	PM CO NO _x SO ₂ VOC Total HAPs Ethylene Glycol Acetaldehyde	0.004 0.02 0.08 0.001 0.23 0.205 0.075 0.13	0.02 0.07 0.34 0.002 0.98 0.84 0.3 0.54
12P-0520	C4D-M-0520 Baghouse	C4D-E-1280 C4D-E-5280	PM VOC Total HAPs Ethylene Glycol Acetaldehyde	0.025 0.2 0.165 0.16 0.005	0.11 0.84 0.68 0.66 0.02
12P-1590	C4E-M-1590 Baghouse	C4E-F-1440	PM	0.001	0.005
12P-1130	L1C-M-1130 Baghouse	L1C-F-1090 L1C-F-1110	PM	0.003	0.001
12P-1140	None	L1C-M-1140	PM	0.001	0.004
12P-0390	L4C-M-0390 Baghouse	L4C-F-0210	PM	0.1	0.001

Emission Point ID	Control Device	Emission Unit ID	Emissions		
			Pollutants	Hourly (pounds/hour)	Annual (tons/year)
12P-2060	L3B-M-2060 Baghouse	L3B-F-2040	PM	0.003	0.001
12P-2080	None	L3B-M-2080	PM	0.007	0.004
<i>CSS-13</i>					
13P-6390	C4A-M-6390 Baghouse	C4A-F-6460	PM	0.002	0.008
13P-7350	C4A-M-7350 Baghouse	C4A-E-7240	PM	0.009	0.036
			CO	0.038	0.16
			NO _x	0.19	0.8
			SO ₂	0.001	0.005
			VOC	0.37	1.53
			Total HAPs	0.36	0.84
			Ethylene Glycol	0.3	1.25
12P-6420	C4B-M-6420 Baghouse	C4B-E-6250	Acetaldehyde	0.06	0.23
			PM	0.004	0.02
			CO	0.02	0.07
			NO _x	0.08	0.34
			SO ₂	0.001	0.002
			VOC	0.23	0.98
			Total HAPs	0.205	0.84
13P-5590	C4E-M-5590 Baghouse	C4E-F-5440	Ethylene Glycol	0.075	0.3
			Acetaldehyde	0.13	0.54
13P-2080	None	C4E-M-2080	PM	0.01	0.004
13P-1130	L1C-M-1130 Baghouse	L1D-F-1110	PM	0.003	0.001
		L1D-F-1120			
13P-1170	None	L1D-M-1130	PM	0.01	0.004

Table 4.1.6.a. – CP3 Maximum Permitted Emissions

Emission Point ID	Control Device	Emission Unit ID	Emissions		
			Pollutants	Hourly (pounds/hour)	Annual (tons/year)
3P-3130	C4S-M-3130 Baghouse	C4S-F-3010	Particulate Matter	0.09	0.01
3P-3190	None	C3L-F-3190	Total VOC	0.01	0.01
3P-155	None	D-155	Ethylene Glycol	0.01	0.01
			Acetaldehyde	0.01	0.01
			Total VOC	0.01	0.01
3P-1070	None	C3L-F-1070	Ethylene Glycol	0.01	0.02
			Total VOC	0.01	0.02
3P-1071	None	C3L-F-1071	Ethylene Glycol	0.01	0.02
			Total VOC	0.01	0.02
3P-1072	None	C3L-F-1072	Ethylene Glycol	0.01	0.02
			Total VOC	0.01	0.02
3P-1032	None	C3L-F-3180	Ethylene Glycol	0.23	0.23
		C3L-F-3140	Total VOC	0.52	0.52

<u>Emission Point ID</u>	<u>Control Device</u>	<u>Emission Unit ID</u>	<u>Emissions</u>		
			<u>Pollutants</u>	<u>Hourly (pounds/hour)</u>	<u>Annual (tons/year)</u>
<u>3P-7020</u>	<u>C3L-F-7020</u>	<u>C3L-F-3150</u>			
		<u>C3L-F-6010</u>			
		<u>C3L-F-7010</u>	<u>Ethylene Glycol</u>	<u>0.71</u>	<u>0.49</u>
		<u>C3L-F-6510</u>	<u>Total VOC</u>	<u>0.71</u>	<u>0.49</u>
<u>3P-2570</u>	<u>None</u>	<u>C3L-F-2570</u>	<u>Ethylene Glycol</u>	<u>0.03</u>	<u>0.03</u>
			<u>Total VOC</u>	<u>0.01</u>	<u>0.01</u>
<u>3P-2580</u>	<u>None</u>	<u>C3L-F-2580</u>	<u>Ethylene Glycol</u>	<u>0.03</u>	<u>0.03</u>
			<u>Total VOC</u>	<u>0.01</u>	<u>0.01</u>
<u>3P-8</u>	<u>None</u>	<u>UTG-F-3020</u>	<u>Ethylene Glycol</u>	<u>0.02</u>	<u>0.09</u>
			<u>Total VOC</u>	<u>0.02</u>	<u>0.09</u>
<u>3P-9</u>	<u>None</u>	<u>UTG-F-3010</u>	<u>Ethylene Glycol</u>	<u>0.02</u>	<u>0.09</u>
			<u>Total VOC</u>	<u>0.02</u>	<u>0.09</u>
<u>3P-1120</u>	<u>None</u>	<u>C3L-F-1120</u>	<u>Ethylene Glycol</u>	<u>0.01</u>	<u>0.02</u>
			<u>Total VOC</u>	<u>0.01</u>	<u>0.02</u>
<u>3P-1210</u>	<u>None</u>	<u>C38-E-1210</u>	<u>Ethylene Glycol</u>	<u>0.19</u>	<u>0.77</u>
			<u>Acetaldehyde</u>	<u>0.06</u>	<u>0.22</u>
			<u>Total VOC</u>	<u>0.37</u>	<u>1.48</u>
<u>3P-3210</u>	<u>None</u>	<u>C38-E-3210</u>	<u>Ethylene Glycol</u>	<u>0.19</u>	<u>0.77</u>
			<u>Acetaldehyde</u>	<u>0.06</u>	<u>0.22</u>
			<u>Total VOC</u>	<u>0.37</u>	<u>1.48</u>
<u>3P-5210</u>	<u>None</u>	<u>C38-E-5210</u>	<u>Ethylene Glycol</u>	<u>0.19</u>	<u>0.77</u>
			<u>Acetaldehyde</u>	<u>0.06</u>	<u>0.22</u>
			<u>Total VOC</u>	<u>0.37</u>	<u>1.48</u>
<u>3P-7210</u>	<u>None</u>	<u>C38-E-7210</u>	<u>Ethylene Glycol</u>	<u>0.19</u>	<u>0.77</u>
			<u>Acetaldehyde</u>	<u>0.06</u>	<u>0.22</u>
			<u>Total VOC</u>	<u>0.37</u>	<u>1.48</u>
<u>3P-0200</u>	<u>L4A-M-0200 Baghouse</u>	<u>L4A-F-0200</u>	<u>Particulate Matter</u>	<u>0.35</u>	<u>0.01</u>
<u>3P-0650</u>	<u>None</u>	<u>C3T-F-0650</u>	<u>Ethylene Glycol</u>	<u>0.01</u>	<u>0.01</u>
			<u>Total VOC</u>	<u>0.01</u>	<u>0.01</u>
<u>3P-1730</u>	<u>None</u>	<u>C3U-F-1730</u>	<u>Total VOC</u>	<u>0.02</u>	<u>0.01</u>
<u>3P-1900</u>	<u>None</u>	<u>C3T-F-1900</u>	<u>Total VOC</u>	<u>0.01</u>	<u>0.01</u>
<u>3P-4620</u>	<u>None</u>	<u>C3T-F-4620</u>	<u>Total VOC</u>	<u>0.01</u>	<u>0.01</u>
<u>3P-7260</u>	<u>None</u>	<u>C3T-F-7260</u>	<u>Total VOC</u>	<u>0.01</u>	<u>0.01</u>

Table 4.1.6.b. – CP4 Maximum Permitted Emissions

<u>Emission Point ID</u>	<u>Control Device</u>	<u>Emission Unit ID</u>	<u>Emissions</u>		
			<u>Pollutants</u>	<u>Hourly (pounds/hour)</u>	<u>Annual (tons/year)</u>
<u>4P-1020</u>	<u>C4S-M-1040 Baghouse</u>	<u>C4S-F-1020</u>	<u>Particulate Matter</u>	<u>0.11</u>	<u>0.46</u>
<u>4P-2100</u>	<u>C4S-M-2100 Baghouse</u>	<u>C4S-F-2050</u>	<u>Particulate Matter</u>	<u>0.01</u>	<u>0.01</u>

Emission Point ID	Control Device	Emission Unit ID	Emissions		
			Pollutants	Hourly (pounds/hour)	Annual (tons/year)
4P-3130	C4S-M-3140 Baghouse	C4S-F-3080	Particulate Matter	0.06	0.01
4P-3190	None	C4L-F-3190	Total VOC	0.01	0.01
4P-1070	None	C4L-A-1070	Ethylene Glycol Total VOC	0.03 0.03	0.10 0.10
4P-1071	None	C4L-A-1071	Ethylene Glycol Total VOC	0.03 0.03	0.10 0.10
4P-1072	None	C4L-A-1072	Ethylene Glycol Total VOC	0.03 0.03	0.10 0.10
4P-1800	None	C4L-F-1800	Ethylene Glycol Total VOC	0.01 0.01	0.04 0.04
4P-1032	None	C4L-F-3140	Ethylene Glycol	0.09	0.42
		C4L-F-3180	Total VOC	0.09	0.42
4P-1900	None	C4R-F-1900	Ethylene Glycol Total VOC	0.01 0.01	0.01 0.01
4P-4620	None	C4T-F-4620	Total VOC	0.01	0.01
4P-1210	None	C48-E-1210	Ethylene Glycol	0.07	0.29
			Acetaldehyde	0.02	0.09
			Total VOC	0.13	0.57
4P-3210	None	C48-E-3210	Ethylene Glycol	0.07	0.29
			Acetaldehyde	0.02	0.09
			Total VOC	0.13	0.57
4P-5210	None	C48-E-5210	Ethylene Glycol	0.07	0.29
			Acetaldehyde	0.02	0.09
			Total VOC	0.13	0.57
4P-0340	C4A-M-0340 Baghouse	C4A-F-0410	Total VOC	0.04	0.01
4P-0200	L4B-M-0200 Baghouse	L4B-F-0200	Particulate Matter	0.11	0.01
4P-4120	None	L24-M-4120	Particulate Matter	0.01	0.02
4P-1730	None	C4U-F-1710	Total VOC	0.01	0.01
4P-1296	None	C4Q-A-1296	SO₂	1.07	9.34
			Hydrochloric Acid	0.62	2.72
4P-4220	C4Q-M-4140/ C4Q-M-4220 Baghouses	C4Q-F-1290	Particulate Matter	0.03	0.10
4P-4180	C4Q-M-4190 Baghouse	C4Q-F-2290	Particulate Matter	0.03	0.12
4P-4160	C4Q-M-4160 Baghouse	C4Q-F-3290	Particulate Matter	0.01	0.24
P-7640	None	F-7640	Total VOC	0.01	0.01
4P-1600	C4T-B-1600	C4L-F-3160	Particulate Matter Carbon Monoxide	0.11 1.90	0.47 8.14

Emission Point ID	Control Device	Emission Unit ID	Emissions		
			Pollutants	Hourly (pounds/hour)	Annual (tons/year)
	Hot Oil Heater	C4L-F-2120	NO_x	3.2	14.0
		C4L-F-3170	SO₂	0.06	0.23
		C41-E-3020	Total VOC	0.34	1.44
		C42-E-2050	Ethylene Glycol	0.01	0.02
		C43-E-3250	Acetaldehyde	0.05	0.19
		C44-E-3280			
		C41-F-3220			
		C43-F-2260			
		C44-F-2290			
		C4L-F-2200			
		C4L-F-5980			
		C4Q-A-1297			
		C4B-F-1420			
		C4C-R-3070			
		C4C-R-1060			
		C4C-E-2320			
		C4B-F-5420			
		E-7070			
		C4C-R-5060			
		C4C-E-6320			
4P-2002	C4Q-M-2002	C4Q-F-5000	Particulate Matter	0.04	0.08
4P-0001	C4Q-M-0001/ C4Q-0001	C4Q-F-5010	Particulate Matter	0.01	0.01
3P-7020	C3L-F-7020	C3L-F-6010 C3L-F-7010	Ethylene Glycol Total VOC	0.39 0.39	0.27 0.27

Table 4.1.6.c. – CSS-7 Maximum Permitted Emissions

Emission Point ID	Control Device	Emission Unit ID	Emissions		
			Pollutants	Hourly (pounds/hour)	Annual (tons/year)
7P-2601	C2A-M-2601 Baghouse	C2A-F-5410	Particulate Matter	0.01	0.01
7P-2609	C2A-M-5350 Baghouse	C2A-E-5240/	Particulate Matter	0.01	0.04
		C2A-B-5010	Carbon Monoxide	0.05	0.18
		C2B-B-7020/ C2B-E-5250	NO_x	0.23	0.91
			SO₂	0.01	0.01
			Total VOC	0.42	1.80
			Ethylene Glycol	0.26	1.10
			Acetaldehyde	0.13	0.54

Emission Point ID	Control Device	Emission Unit ID	Emissions		
			Pollutants	Hourly (pounds/hour)	Annual (tons/year)
7P-0520	C2D-M-0520 Baghouse	C2D-E-5280	Particulate Matter	0.03	0.09
			Total VOC	0.14	0.57
			Ethylene Glycol	0.12	0.46
			Acetaldehyde	0.01	0.02
7P-0607	L36-M-0607 Baghouse	L36-F-6040	Particulate Matter	0.01	0.01
7EC-15	L21-M-1050 Baghouse	L21-F-1020	Particulate Matter	0.01	0.01
7P-1510	L22-M-2120 Baghouse	L22-F-2040	Particulate Matter	0.01	0.01
7P-4227A	L14-M-4070 Baghouse	L14-F-4070	Particulate Matter	0.01	0.01
7P-4227B	L14-M-4080 Baghouse	L14-F-4080	Particulate Matter	0.01	0.01
7P-0430	None	L14-U-4030	Particulate Matter	0.01	0.01
7P-2660	None	L14-F-2660	Total VOC	0.01	0.01
7P-9002	None	L14-F-9001	Total VOC	0.01	0.01
2P-9001	M-2603 Baghouse C2T-B-9001 Hot Oil Heater	C2B-F-5420	PM	0.04	0.16
			CO	0.91	3.6
			NO_x	1.7	6.7
		C2B-M-5040	SO₂	0.05	0.2
			VOC^a	0.10	0.39
			Total HAP^b	0.08	0.28
		C2C-R-5060	Ethylene Glycol	0.04	0.16
			Acetaldehyde	0.03	0.11
			Benzene^c	0.01	0.01

^aAfter expiration of R13-2807T, the VOC emission limit will decrease to 0.09 lb/hr and 0.38 TPY.

^bAfter expiration of R13-2807T, the HAP emission limit will decrease to 0.07 lb/hr and 0.27 TPY.

^cAfter expiration of R13-2807T, the Benzene limit shall be removed.

Table 4.1.6.d. – CSS-8 Maximum Permitted Emissions

Emission Point ID	Control Device	Emission Unit ID	Emissions		
			Pollutants	Hourly (pounds/hour)	Annual (tons/year)
8E-02	S8A-M-2390 Baghouse	S8A-F-2430	Particulate Matter	0.01	0.01
8E-03	S8A-M-3350 Baghouse	S8A-E-3240/ S8A-B-3010	Particulate Matter	0.07	0.31
			Ethylene Glycol	0.04	0.16
			Carbon Monoxide	0.05	0.19
			NO_x	0.22	0.90
			SO₂	0.01	0.01
			Total VOC	0.09	0.38

Emission Point ID	Control Device	Emission Unit ID	Emissions		
			Pollutants	Hourly (pounds/hour)	Annual (tons/year)
8E-04	S8B-M-2420 Baghouse	S8B-E-2250/ S8B-B-2020	Particulate Matter	0.04	0.18
			Ethylene Glycol	0.03	0.12
			Acetaldehyde	0.04	0.19
			Carbon Monoxide	0.02	0.09
			NOx	0.10	0.40
			SO2	0.01	0.01
			Total VOC	0.08	0.35
8E-05	S8D-M-1520 Baghouse	S8D-E-1280	Particulate Matter	0.02	0.08
8E-06	S8A-M-1590 Baghouse	S8A-M-1610 S8E-F-1440	Particulate Matter	0.01	0.01
8E-08	L37-M-7130 Baghouse	L37-F-7050	Particulate Matter	0.01	0.01
8E-09	None	L37-M-7150	Particulate Matter	0.01	0.02
8EP-204A	L12-M-2030 Baghouse	L12-F-2030	Particulate Matter	0.01	0.01
8EP-204B	L12-M-2040 Baghouse	L12-F-2040	Particulate Matter	0.01	0.01
8P-4127A	L13-M-3050 Baghouse	L13-F-3050	Particulate Matter	0.01	0.01
8P-4127B	L13-M-3060 Baghouse	L13-F-3060	Particulate Matter	0.01	0.01
8ECS4	L11-M-1010 Baghouse	L11-F-1010	Particulate Matter	0.01	0.06
8ECS5	L11-M-1020 Baghouse	L11-F-1020	Particulate Matter	0.01	0.06
8E-12	None	L13-M-3020	Particulate Matter	0.06	0.06
8P-1030	None	L11-U-1030	Particulate Matter	0.01	0.05
8P-1050	None	L13-U-3030	Particulate Matter	0.01	0.05
8EP-208	None	L12-M-4030	Particulate Matter	0.01	0.02
7P-2660	None	L14-F-2660	Total VOC's	0.01	0.01
7P-9002	None	L14-F-9001	Total VOC's	0.01	0.01
2P-9001	C2T-B-9001	S8A-E-1420	Particulate Matter	0.04	0.16
		S8C-R-1060 / S8C-R-3070	Ethylene Glycol	0.05	0.19
			Acetaldehyde	0.04	0.13
			Total VOC	0.11	3.60
		C2T-F-2670	Carbon Monoxide	0.91	6.70
		C2T-B-9001	NOx	1.70	0.20
			SO2	0.05	0.46

Table 4.1.6.e. – CSS-9 Maximum Permitted Emissions

<u>Emission Point ID</u>	<u>Control Device</u>	<u>Emission Unit ID</u>	<u>Emissions</u>		
			<u>Pollutants</u>	<u>Hourly (pounds/hour)</u>	<u>Annual (tons/year)</u>
<u>9P-1701A</u>	<u>L15-M-1701A Baghouse</u>	<u>L15-F-1701A</u>	<u>Particulate Matter</u>	<u>0.01</u>	<u>0.01</u>
<u>9P-1701B</u>	<u>L15-M-1701B Baghouse</u>	<u>L15-F-1701B</u>		<u>0.01</u>	<u>0.01</u>
<u>9P-5091</u>	<u>None</u>	<u>L15-U-5090</u>		<u>0.01</u>	<u>0.02</u>
<u>9P-2701A</u>	<u>L15-M-2701A Baghouse</u>	<u>L15-F-2701A</u>		<u>0.01</u>	<u>0.01</u>
<u>9P-2701B</u>	<u>L15-M-2701B Baghouse</u>	<u>L15-F-2701B</u>		<u>0.01</u>	<u>0.01</u>
<u>P-1060</u>	<u>None</u>	<u>L15-U-6110</u>		<u>0.01</u>	<u>0.02</u>
<u>9E-10</u>	<u>L17-M-7230 Baghouse</u>	<u>L17-F-7130</u>		<u>0.01</u>	<u>0.04</u>
		<u>L17-F-7140</u>			
<u>9E-11</u>	<u>None</u>	<u>L17-M-7240</u>		<u>0.01</u>	<u>0.03</u>
<u>9ECS5</u>	<u>L15-M-1020 Baghouse</u>	<u>L15-F-1020</u>		<u>0.02</u>	<u>0.08</u>
<u>9P-1030</u>	<u>None</u>	<u>L15-U-1030</u>		<u>0.01</u>	<u>0.06</u>
<u>9ECS4</u>	<u>M-1010</u>	<u>F-1010</u>		<u>0.02</u>	<u>0.08</u>

Table 4.1.6.f. – CSS-10 Maximum Permitted Emissions

<u>Emission Point ID</u>	<u>Control Device</u>	<u>Emission Unit ID</u>	<u>Emissions</u>		
			<u>Pollutants</u>	<u>Hourly (pounds/hour)</u>	<u>Annual (tons/year)</u>
<u>10P-1340</u>	<u>C3A-M-1340 Baghouse</u>	<u>C3A-F-1410</u>	<u>Particulate Matter</u>	<u>0.01</u>	<u>0.01</u>
<u>10P-2390</u>	<u>C3A-M-2390 Baghouse</u>	<u>C3A-F-2460</u>	<u>Particulate Matter</u>	<u>0.01</u>	<u>0.01</u>
<u>10P-3350</u>	<u>C3A-M-3350 Baghouse</u>	<u>C3A-E-3240</u>	<u>Particulate Matter</u>	<u>0.04</u>	<u>0.04</u>
			<u>Carbon Monoxide</u>	<u>0.13</u>	<u>0.13</u>
			<u>NOx</u>	<u>0.65</u>	<u>0.65</u>
			<u>SO2</u>	<u>0.01</u>	<u>0.01</u>
			<u>Total VOC</u>	<u>1.53</u>	<u>1.53</u>
			<u>Ethylene Glycol</u>	<u>0.30</u>	<u>1.25</u>
			<u>Acetaldehyde</u>	<u>0.06</u>	<u>0.23</u>
<u>10P-2420</u>	<u>C3B-M-2420 Baghouse</u>	<u>C3B-E-2250</u>	<u>Particulate Matter</u>	<u>0.01</u>	<u>0.04</u>
			<u>Carbon Monoxide</u>	<u>0.02</u>	<u>0.06</u>
			<u>NOx</u>	<u>0.07</u>	<u>0.28</u>
			<u>SO2</u>	<u>0.01</u>	<u>0.01</u>
			<u>Total VOC</u>	<u>0.24</u>	<u>1.00</u>
			<u>Ethylene Glycol</u>	<u>0.08</u>	<u>0.34</u>
			<u>Acetaldehyde</u>	<u>0.13</u>	<u>0.53</u>
<u>10P-0520</u>		<u>C3D-E-1280</u>	<u>Particulate Matter</u>	<u>0.02</u>	<u>0.06</u>

Emission Point ID	Control Device	Emission Unit ID	Emissions		
			Pollutants	Hourly (pounds/hour)	Annual (tons/year)
	C3D-M-0520 Baghouse	C3D-E-5280	Total VOC	0.19	0.80
			Ethylene Glycol	0.15	0.62
			Acetaldehyde	0.01	0.02
10P-1590	C3E-M-1590 Baghouse	C3E-F-1440	Particulate Matter	0.01	0.01
10P-1050	L3A-M-1050 Baghouse	L3A-F-1030	Particulate Matter	0.01	0.01
10P-1100	None	L3A-M-1070	Particulate Matter	0.01	0.01
10P-1130	L1A-M-1130 Baghouse	L1A-F-1090	Particulate Matter	0.01	0.01
		L1A-F-1100			
10P-1140	None	L1A-M-1140	Particulate Matter	0.01	0.01

Table 4.1.6.g. – CSS-11 Maximum Permitted Emissions

Emission Point ID	Control Device	Emission Unit ID	Emissions		
			Pollutants	Hourly (pounds/hour)	Annual (tons/year)
11P-6340	C3A-M-6340 Baghouse	C3A-F-5410	Particulate Matter	0.01	0.01
11P-6390	C3A-M-6390 Baghouse	C3A-F-5460	Particulate Matter	0.01	0.01
11P-7350	C3A-M-7350 Baghouse	C3A-E-7240	Particulate Matter	0.07	0.03
			Carbon Monoxide	0.03	0.13
			NOx	0.15	0.65
			SO2	0.01	0.01
			Total VOC	0.37	1.53
			Ethylene Glycol	0.30	1.25
			Acetaldehyde	0.06	0.23
11P-6420	C3B-M-6420 Baghouse	C3B-E-6250	Particulate Matter	0.01	0.02
			Carbon Monoxide	0.02	0.06
			NOx	0.07	0.28
			SO2	0.01	0.01
			Total VOC	0.24	1.01
			Ethylene Glycol	0.08	0.34
			Acetaldehyde	0.13	0.53
11P-5590	C3E-M-5590 Baghouse	C3E-F-5440	Particulate Matter	0.01	0.01
11P-1090	L3B-M-2060 Baghouse	L3B-F-2040	Particulate Matter	0.01	0.01
11P-1080	None	L3B-M-2080	Particulate Matter	0.01	0.01
11P-1160	L1B-M-1160 Baghouse	L1B-F-2115	Particulate Matter	0.01	0.01
		L1B-F-2160			

Emission Point ID	Control Device	Emission Unit ID	Emissions		
			Pollutants	Hourly (pounds/hour)	Annual (tons/year)
11P-2170	None	L1B-M-2170	Particulate Matter	0.01	0.01

Table 4.1.6.h. – CSS-12 Maximum Permitted Emissions

Emission Point ID	Control Device	Emission Unit ID	Emissions		
			Pollutants	Hourly (pounds/hour)	Annual (tons/year)
12P-2390	C4A-M-2390 Baghouse	C4A-F-2460	Particulate Matter	0.01	0.01
12P-3350	C4A-M-3350 Baghouse	C4A-E-3240	Particulate Matter	0.01	0.04
			Carbon Monoxide	0.04	0.16
			NOx	0.19	0.80
			SO2	0.01	0.01
			Total VOC	0.37	1.53
			Ethylene Glycol	0.30	1.25
			Aldehyde	0.06	0.23
12P-2420	C4B-M-2420 Baghouse	C4B-E-2250	Particulate Matter	0.01	0.02
			Carbon Monoxide	0.02	0.07
			NOx	0.08	0.34
			SO2	0.01	0.01
			Total VOC	0.23	0.98
			Ethylene Glycol	0.08	0.30
			Aldehyde	0.13	0.54
12P-0520	C4D-M-0520 Baghouse	C4D-E-1280	Particulate Matter	0.03	0.11
		C4D-E-5280	Total VOC	0.20	0.84
			Ethylene Glycol	0.16	0.66
			Acetaldehyde	0.01	0.02
12P-1590	C4E-M-1590 Baghouse	C4E-F-1440	Particulate Matter	0.01	0.01
12P-1130	L1C-M-1130 Baghouse	L1C-F-1090	Particulate Matter	0.01	0.01
		L1C-F-1110			
12P-1140	None	L1C-M-1140	Particulate Matter	0.01	0.01
12P-0390	L4C-M-0390 Baghouse	L4C-F-0210	Particulate Matter	0.10	0.01
12P-2060	L3B-M-2060 Baghouse	L3B-F-2040	Particulate Matter	0.01	0.01
12P-2080	None	L3B-M-2080	Particulate Matter	0.01	0.01

Table 4.1.6.i. – CSS-13 Maximum Permitted Emissions

Emission Point ID	Control Device	Emission Unit ID	Emissions		
			Pollutants	Hourly (pounds/hour)	Annual (tons/year)
13P-6390	C4A-M-6390 Baghouse	C4A-F-6460	Particulate Matter	0.01	0.01

Emission Point ID	Control Device	Emission Unit ID	Emissions		
			Pollutants	Hourly (pounds/hour)	Annual (tons/year)
13P-7350	C4A-M-7350 Baghouse	C4A-E-7240	Particulate Matter	0.01	0.04
			Carbon Monoxide	0.04	0.16
			NOx	0.19	0.80
			SO2	0.01	0.01
			Total VOC	0.37	1.53
			Ethylene Glycol	0.30	1.25
			Acetaldehyde	0.06	0.23
12P-6420	C4B-M-6420 Baghouse	C4B-E-6250	Particulate Matter	0.01	0.02
			Carbon Monoxide	0.02	0.07
			NOx	0.08	0.34
			SO2	0.01	0.01
			Total VOC	0.23	0.98
			Ethylene Glycol	0.08	0.30
			Acetaldehyde	0.13	0.54
13P-5590	C4E-M-5590 Baghouse	C4E-F-5440	Particulate Matter	0.01	0.01
13P-2080	None	C4E-M-2080	Particulate Matter	0.01	0.01
13P-1130	L1C-M-1130 Baghouse	L1D-F-1110	Particulate Matter	0.01	0.01
		L1D-F-1120			
13P-1170	None	L1D-M-1130	Particulate Matter	0.01	0.01

Table 4.1.6.j. – Boilers and Heaters Maximum Permitted Emissions

Emission Point ID	Control Device	Emission Unit ID	Emissions									
			CO		NOx		PM10		SOx		VOC	
			lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
U-B-2010	None	UGS-B-2010	0.34	1.51	0.41	1.80	0.03	0.14	0.01	0.02	0.02	0.10
U-B-3010	None	UGS-B-3010	0.08	0.33	0.09	0.39	0.01	0.03	0.01	0.01	0.01	0.02
U-B-3011	None	UGS-B-3011	0.08	0.33	0.09	0.39	0.01	0.03	0.01	0.01	0.01	0.02
U-B-4010	None	UGS-B-4010	0.13	0.58	0.16	0.69	0.12	0.06	0.01	0.01	0.01	0.04
U-B-4011	None	UGS-B-4011	0.13	0.58	0.16	0.69	0.12	0.06	0.01	0.01	0.01	0.04
U-B-1050	None	UGS-B-1050	0.01	0.05	0.03	0.11	0.01	0.01	0.01	0.01	0.01	0.01
U-B-1060	None	UGS-B-1060	0.01	0.05	0.03	0.11	0.01	0.01	0.01	0.01	0.01	0.01
U-B-1004	None	UGS-B-1004	0.01	0.05	0.03	0.11	0.01	0.01	0.01	0.01	0.01	0.01
U-B-1005	None	UGS-B-1005	0.01	0.05	0.03	0.11	0.01	0.01	0.01	0.01	0.01	0.01
U-B-1006	None	UGS-B-1006	0.01	0.05	0.03	0.11	0.01	0.01	0.01	0.01	0.01	0.01
U-B-1007	None	UGS-B-1007	0.01	0.05	0.03	0.11	0.01	0.01	0.01	0.01	0.01	0.01
U-B-4001	None	UGS-B-4001	0.01	0.05	0.03	0.11	0.01	0.01	0.01	0.01	0.01	0.01
U-B-4002	None	UGS-B-4002	0.01	0.05	0.03	0.11	0.01	0.01	0.01	0.01	0.01	0.01
U-B-4003	None	UGS-B-4003	0.01	0.05	0.03	0.11	0.01	0.01	0.01	0.01	0.01	0.01

<u>Emission Point ID</u>	<u>Control Device</u>	<u>Emission Unit ID</u>	<u>Emissions</u>									
			<u>CO</u>		<u>NOx</u>		<u>PM10</u>		<u>SOx</u>		<u>VOC</u>	
			<u>lb/hr</u>	<u>tpv</u>	<u>lb/hr</u>	<u>tpv</u>	<u>lb/hr</u>	<u>tpv</u>	<u>lb/hr</u>	<u>tpv</u>	<u>lb/hr</u>	<u>tpv</u>
<u>U-B-4004</u>	<u>None</u>	<u>UGS-B-4004</u>	<u>0.01</u>	<u>0.05</u>	<u>0.03</u>	<u>0.11</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>

Compliance with the hourly PM and SO₂ emission limits for 3P-1600, 4P-1600, and 2P-9001, shall demonstrate compliance with the less stringent 45CSR§2-4.1.b hourly PM emission limits and the 45CSR§10-3.3.f hourly SO₂ emission limits. Compliance with the hourly PM emission limits for ~~3P-1020, 3P-2002~~, 3P-3130, 3P-0200, 4P-1020, 4P-2100, 4P-3130, 4P-0340, 4P-0200, 4P-4120, 4P-4220, 4P-4180, 4P-4160, 7P-2601, 7P-2609, 7P-0520, 7P-0607, 7EC-15, 7P-1510, 7P-4227A, 7P-4227B, 7P-0430, 8E-02, 8E-03, 8E-04, 8E-05, 8E-06, 8E-08, 8E-09, 8EP-204A, 8EP-204B, 8P-4127A, 8P-4127B, 8ECS4, 8ECS5, 8E-12, 8P-1030, 8P-1050, 8EP-208, 9P-1701A, 9P-1701B, 9P-5091, 9P-2701A, 9P-2701B, 9P-6110, 9E-10, 9E-11, 9ECS5, 9P-1030, 10P-1340, 10P-2390, 10P-3350, 10P-2420, 10P-0520, 10P-1590, 10P-1050, 10P-1100, 10P-1130, 10P-1140, 11P-6340, 11P-6390, 11P-7350, 11P-6420, 11P-5590, 11P-1090, 11P-1080, 11P-1160, 11P-2170, 12P-2390, 12P-3350, 12P-2420, 12P-0520, 12P-1590, 12P-1130, 12P-1140, 12P-0390, 12P-2060, 12P-2080, 13P-6390, 13P-7350, 12P-6420, 13P-5590, 13P-2080, 13P-1130, and 13P-1170 shall demonstrate compliance with the less stringent 45CSR§7-4.1 PM emission limits. ~~[45CSR13, R13-1650CK and R13-2807T, 4.1.6 4.1.11, 4.1.7 4.1.12, 4.1.8 4.1.13, 4.1.9 4.1.14, and APPENDIX A; 45CSR§2-4.1.b; 45CSR§7-4.1; 45CSR§10-3.3.f; 45CSR§30-12.7 for emission point 4P-1296]~~

- 4.1.7. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average. (3P-1600, 4P-1600, and 2P-9001) ~~[45CSR13, R13-1650CK and R13-2807T, 4.1.7 4.1.12; 45CSR§2-3.1]~~
- 4.1.8. Compliance with the visible emission requirements of 4.1.7 shall be determined in accordance with 40 C.F.R. Part 60, Appendix A, Method 9 or by using measurements from continuous opacity monitoring systems approved by the Director. The Director may require the installation, calibration, maintenance and operation of continuous opacity monitoring systems and may establish policies for the evaluation of continuous opacity monitoring results and the determination of compliance with the visible emission requirements of 4.1.7. Continuous opacity monitors shall not be required on fuel burning units which employ wet scrubber systems for emission control. (3P-1600, 4P-1600, and 2P-9001) ~~[45CSR13, R13-1650CK and R13-2807T, 4.1.7 4.1.12; 45CSR§2-3.2]~~
- 4.1.9. At all times, including periods of start-ups, shutdowns and malfunctions, owners and operators shall, to the extent practicable, maintain and operate any fuel burning unit(s) in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, visible emission observations, review of operating and maintenance procedures and inspection of the source. (3P-1600, 4P-1600, and 2P-9001) ~~[45CSR§2-9.2]~~
- 4.1.10. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity. (~~3P-1020, 3P-2002~~, 3P-3130, 3P-0200, 4P-1020, 4P-2100, 4P-3130, 4P-0340, 4P-0200, 4P-4120, 4P-4220, 4P-4180, 4P-4160, 7P-2601, 7P-2609, 7P-0520, 7P-0607, 7EC-15, 7P-1510, 7P-4227A, 7P-4227B, 7P-0430, 8E-02, 8E-03, 8E-04, 8E-05, 8E-06, 8E-08, 8E-09, 8EP-204A, 8EP-204B, 8P-4127A, 8P-4127B, 8ECS4, 8ECS5, 8E-12, 8P-1030, 8P-1050, 8EP-208, 9P-1701A, 9P-1701B, 9P-5091, 9P-2701A, 9P-2701B, 9P-6110, 9E-10, 9E-11, 9ECS5, 9P-1030, 10P-1340, 10P-2390, 10P-3350, 10P-2420, 10P-0520, 10P-1590, 10P-1050, 10P-1100, 10P-1130, 10P-1140, 11P-6340, 11P-6390, 11P-7350, 11P-6420, 11P-5590, 11P-1090, 11P-1080, 11P-1160, 11P-2170, 12P-2390, 12P-3350, 12P-2420, 12P-0520, 12P-1590, 12P-1130, 12P-1140, 12P-0390, 12P-2060, 12P-2080, 13P-6390,

13P-7350, 12P-6420, 13P-5590, 13P-2080, 13P-1130, and 13P-1170) [45CSR13, R13-1650~~CK~~ and R13-2807T, ~~4.1.8~~ 4.1.13; 45CSR§7-3.1]

- 4.1.11. No person shall cause, suffer, allow or permit emissions from any storage structure(s) associated with any manufacturing process(es) that pursuant to 45CSR§7-5.1 is required to have a full enclosure and be equipped with a particulate matter control device. (~~3P-1020, 3P-2002, 3P-0200, 4P-1020, 4P-2100, 4P-0340, 4P-0200, 7EC-15, 7P-1510, 7P-4227A, 7P-4227B, 8E-08, 8EP-204A, 8EP-204B, 8P-4127A, 8P-4127B, 8ECS4, 8ECS5, 9P-2701A, 9P-2701B, 9E-10, 9ECS5, 10P-1340, 10P-1130, 11P-6340, 11P-1160, 12P-1130, 12P-0390, and 13P-1130)~~ [45CSR13, R13-1650~~CK~~ and R13-2807T, ~~4.1.8~~ 4.1.13; 45CSR§7-3.7]
- 4.1.12. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable. [45CSR13, R13-1650~~CK~~ and R13-2807T, ~~4.1.8~~ 4.1.13; 45CSR§7-5.1]
- 4.1.13. The owner or operator of a plant shall maintain particulate matter control of the plant premises, and plant owned, leased or controlled access roads, by paving, application of asphalt, chemical dust suppressants or other suitable dust control measures. Good operating practices shall be implemented and when necessary particulate matter suppressants shall be applied in relation to stockpiling and general material handling to minimize particulate matter generation and atmospheric entrainment. [45CSR13, R13-1650~~CK~~ and R13-2807T, ~~4.1.8~~ 4.1.13; 45CSR§7-5.2]
- 4.1.14. Due to unavoidable malfunction of equipment, emissions exceeding those set forth in 45CSR7 may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the malfunction. In cases of major equipment failure, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director [45CSR13, R13-1650~~CK~~ and R13-2807T, ~~4.1.8~~ 4.1.13; 45CSR§7-9]
- 4.1.15. The pertinent emissions control provisions of 40 C.F.R. 63, Subpart JJJ – “National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins” applicable to continuous process vents include the following:
- a. The owner or operator of an affected source producing PET using a continuous terephthalic acid process shall limit organic HAP emissions from continuous process vents in the collection of raw material preparation sections (emission points C3L-F-3190, C3L-F-3140, C3L-F-3150, C3L-F-3160, C3L-F-4100, C3L-F-4211, C3L-F-4210, C3L-F-5040, C3L-F-6010, C3L-F-7010, C3L-F-2570, C3L-F-2580, C31-E-1020, C32-E-1050, C31-F-1220, C3L-F-0430, C4L-F-3190, C4L-F-3140, C4L-F-3160, C4L-F-2120, C4L-F-3170, C41-E-3020, C42-E-2050, C41-F-3220, and C4L-F-0430) within the affected source by complying with the following:
- Organic HAP emissions from all continuous process vents associated with the esterification vessels in each individual raw materials preparation section shall, as a whole, be no greater than 0.04 kg organic HAP per Mg of product from the associated TPPU(s); or alternatively, organic HAP emissions from all continuous process vents associated with the esterification vessels in the collection of raw material preparation sections within the affected source shall, as a whole, be no greater than 0.04 kg organic HAP per Mg of product from all associated TPPU(s). Other continuous process vents (i.e., those not associated with the esterification vessels) in the collection of raw materials preparation sections within the affected source shall comply with 40 C.F.R. §63.1315. [45CSR34; 40 C.F.R. §§63.1316(b)(2)(i) and 63.1316(b)(2)(i)(A)]

- b. The owner or operator of an affected source producing PET using a continuous terephthalic acid process shall limit organic HAP emissions from continuous process vents in the collection of polymerization reaction sections (emission points C3L-F-1070, C3L-F-1071, C3L-F-1072, C3L-F-3180, C33-F-2250, C33-F-5010, C34-F-3280, C33-F-2260, C34-F-2290, C4L-A-1070, C4L-A-1071, C4L-A-1072, C4L-F-3180, C43-E-3250, C44-E-3280, C43-F-2260, and C44-F-2290) within the affected source by complying with the following:

Organic HAP emissions from all continuous process vents in each individual polymerization reaction section (including emissions from any equipment used to further recover ethylene glycol, but excluding emissions from process contact cooling towers) shall, as a whole, be no greater than 0.02 kg organic HAP per Mg of product from the associated TPPU(s); or alternatively, organic HAP emissions from all continuous process vents in the collection of polymerization reactions sections within the affected source shall, as a whole, be no greater than 0.02 kg organic HAP per Mg of product from all associated TPPU(s).

[45CSR13, R13-1650~~CK~~ and R13-2807T, ~~4.1.10~~ 4.1.15; 45CSR34; 40 C.F.R. §§63.1316(b)(2)(ii) and 63.1316(b)(2)(ii)(A)]

- 4.1.16. The permittee shall comply with the requirements of 40 C.F.R. §§63.132 through 63.149 for wastewater, with the differences noted in 40 C.F.R. §§63.1330(b)(1) through (b)(22). The pertinent emission control provisions of 40 C.F.R. §§63.132 through 63.149 applicable to Group 1 wastewater streams include the following:
- a. For each wastewater tank that receives, manages, or treats a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream, the permittee shall operate and maintain a fixed roof.
- b. For each container that receives, manages, or treats a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream, the permittee shall comply with the requirements of 40 C.F.R. §§63.135(b) through (f).
- c. The owner or operator shall achieve the required mass removal (RMR) of Table 9 compounds for a wastewater stream that is Group 1 for Table 9 compounds.

[45CSR13, R13-1650~~CK~~ and R13-2807T, ~~4.1.10~~ 4.1.15; 45CSR34; 40 C.F.R. §§63.1330(b), 63.132(a)(2)(i), 63.133(a)(1), 63.135(a) through (f), and 63.138(f)]

- 4.1.17. The permittee shall comply with the requirements of 40 C.F.R. 63, Subpart H for equipment leaks, with the differences noted in 40 C.F.R. §§63.1331(a)(1) through (a)(13). The pertinent equipment leak standards include 40 C.F.R. §§63.162 (Standards: General.), 63.163 (Standards: Pumps in light liquid service.), 63.164 (Standards: Compressors.), 63.165 (Standards: Pressure relief devices in gas/vapor service.), 63.166 (Standards: Sampling connection system.), 63.167 (Standards: Open-ended valves or lines.), 63.168 (Standards: Valves in gas/vapor service and in light liquid service.), 63.169 (Standards: Pumps, valves, connectors, and agitators in heavy liquid service; instrumentation systems; and pressure relief devices in liquid service.), 63.170 (Standards: Surge control vessels and bottoms receivers.), 63.171 (Standards: Delay of repair.), 63.172 (Standards: Closed-vent systems and control devices.), 63.173 (Standards: Agitators in gas/vapor service and in light liquid service.), 63.174 (Standards: Connectors in gas/vapor service and in light liquid service.), 63.175 (Quality improvement program for valves.), and 63.176 (Quality improvement program for pumps.). **[45CSR13, R13-1650~~CK~~ and R13-2807T, ~~4.1.10~~ 4.1.15; 45CSR34; 40 C.F.R. §§63.1331(a), 63.162, 63.163, 63.164, 63.165, 63.166, 63.167, 63.168, 63.169, 63.170, 63.171, 63.172, 63.173, 63.174, 63.175, and 63.176]**
- 4.1.18. *Operation and Maintenance of Air Pollution Control Equipment.* The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions,

or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary. ~~[45CSR13, R13-1650C and R13-2807T, 4.1.12 4.1.18; 45CSR§13-5.11]~~

4.1.19. Carbon Monoxide (CO) emissions from the Hot Oil Heater [C3T-F-1700] shall be limited to no more than 400 ppm by volume on a dry basis corrected to 3 percent oxygen based on an average calculated from three (3) separate test runs, each test run lasting at least 1 hour. [45CSR13, R13-1650K and R13-2807T, 4.1.6]

4.1.20. The permittee shall develop a written startup, shutdown, and malfunction plan (SSMP) for the Hot Oil Heater [C3T-F-1700] according to the provisions in 40C.F.R. §63.6(e)(3). [45CSR13, R13-1650K and R13-2807T, 4.1.7; 40 C.F.R. §63.6(e)(3)]

4.1.21. The permittee shall develop a site-specific testing plan according to the requirements in 40 C.F.R. §63.7(c). [45CSR13, R13-1650K and R13-2807T, 4.1.8; 40 C.F.R. §63.7(c)]

4.1.22. The Small Boilers [UGS-B-2010, UGS-B-4010, UGS-B-4011, UGS-B-3010, and UGS-B-3011] and Space Heaters [UGS-B-1050, UGS-B-1060, UGS-B-1004, UGS-B-1005, UGS-B-1006, UGS-B-1007, UGS-B-4001, UGS-B-4002, UGS-B-4003, UGS-B-4004] shall be operated in accordance to the following limits and requirements:

- a. The boilers and heaters shall be limited to the maximum designed heat input rates defined in the Emission Units Table in Section 1.0 of this permit.
- b. Fuel consumption shall be limited to natural gas.
- c. Visible emissions from Emission Points U-B-2010, U-B-3010, U-B-3011, U-B-4010, U-B-4011, U-B-1050, U-B-1060, U-B-1004, U-B-1005, U-B-1006, U-B-1007, U-B-4001, U-B-4002, U-B-4003, and U-B-4004 shall not exceed a maximum of 10% opacity on a 6-minute averaging period except as authorized per 45CSR2, Section 3.1.

[45CSR13, R13-1650K and R13-2807T, 4.1.9; 45CSR§2-3.1]

4.2. Monitoring Requirements

4.2.1. For the purpose of determining compliance with the production limits set forth in Section 4.1.1 of this permit, the permitted facility shall monitor the daily average hourly and total annual production rates for each of the process units identified in Table 4.1.1. of this permit. ~~[45CSR13, R13-1650C and R13-2807T, 4.2.1]~~

~~4.2.2. For the purpose of determining compliance with the operating limits set forth in Section 4.1.2, 4.1.3, and 4.1.4 of this permit, the permitted facility shall monitor the hourly and annual fuel consumption rates associated with the routine operation of the Hot Oil Heaters (C2T-B-9001, C3T-B-1600, C4T-B-1600). [45CSR13, R13-1650C, 4.2.2]~~

For the purpose of determining compliance with the operating limits set forth in Section 4.1.2., 4.1.3., 4.1.4., and 4.1.22 of this permit, the permitted facility shall monitor the hourly and annual fuel consumption rates associated with the routine operation of the Hot Oil Heaters [C2T-B-9001, C3T-B-1600, C4T-B-1600, and C3T-F-1700], the Small Boilers [UGS-B-2010, UGS-B-4010, UGS-B-4011, UGS-B-3010, and UGS-B-3011], and the Space Heaters [UGS-B-1050, UGS-B-1060, UGS-B-1004, UGS-B-1005, UGS-B-1006, UGS-B-1007, UGS-B-4001, UGS-B-4002, UGS-B-4003, UGS-B-4004]. [45CSR13, R13-1650K and R13-2807T, 4.2.2]

4.2.3. For the purpose of determining compliance with the particulate emission limits set forth in section 4.1.5 and ~~4.1.6~~ 4.1.22 of this permit, the permitted facility shall monitor the pressure differential across each of the dust

collectors identified in Section 1.0 of this permit during periods of routine operation. [~~45CSR13, R13-1650~~ CK and R13-2807T, 4.2.3]

- 4.2.4. Continuous process vents using a control or recovery device to comply with 4.1.15 shall comply with all applicable monitoring provisions specified for continuous process vents in 40 C.F.R. §63.114 except for the differences noted in 40 C.F.R. §63.1315(a). The pertinent sections of 40 C.F.R. §63.114 applicable to continuous process vents include the following:

- a. For any bypass line between the origin of the gas stream and the point where the gas stream reaches the process vent that could divert the gas stream directly to the atmosphere, the owner or operator of a process vent shall properly install, maintain, and operate a flow indicator that takes a reading at least once every 15 minutes. Records shall be generated as specified in 40 C.F.R. §63.118(a)(3). The flow indicator shall be installed at the entrance to any bypass line that could divert the gas stream to the atmosphere.

[~~45CSR13, R13-1650~~ CK and R13-2807T, 4.2.4; ~~45CSR34; 40 C.F.R. §§63.1317, 63.1315(a), 63.114(d) and (d)(1)~~]

- 4.2.5. To demonstrate compliance with the wastewater provisions of 4.1.16, the permittee shall monitor the effluent BOD, effluent TSS, effluent pH, effluent flow, effluent priority pollutants, and effluent bioassay of the wastewater system in accordance with their NPDES permit (Permit No. WV0000132). [~~45CSR13, R13-1650~~ CK and R13-2807T, 4.2.5; ~~45CSR34; 40 C.F.R. §§63.143(c) and 63.146(a)~~]

4.3. Testing Requirements

- 4.3.1. The permittee shall comply with the requirements of 40 C.F.R. 63, Subpart H for equipment leaks, with the differences noted in 40 C.F.R. §§63.1331(a)(1) through (a)(13). The pertinent equipment leak testing provisions include 40 C.F.R. §63.180 (Test methods and procedures.). [~~45CSR13, R13-1650~~ CK and R13-2807T, 4.3.1; ~~45CSR34; 40 C.F.R. §§63.1331(a) and 63.180~~]
- 4.3.2. At such reasonable times as the Director may designate, the owner or operator of any fuel burning unit(s) may be required to conduct or have conducted tests to determine the compliance of such unit(s) with the emission limitations of 4.1.6. Such tests shall be conducted in accordance with the appropriate method set forth in the Appendix to 45CSR2 or other equivalent EPA approved method approved by the Director. The Director, or his duly authorized representative, may at his option witness or conduct such tests. Should the Director exercise his option to conduct such tests, the operator will provide all necessary sampling connections and sampling ports located in such manner as the Director may require, power for test equipment, and the required safety equipment such as scaffolding, railings and ladders to comply with generally accepted good safety practices. Sufficient information on temperatures, velocities, pressures, weights and dimensional values shall be reported to the Director, with such necessary commentary as he may require to allow an accurate evaluation of the reported test results and the conditions under which they were obtained. (*3P-1600, 4P-1600, and 2P-9001*) [~~45CSR~~§§~~2-8.1.b and 8.1.b.1~~]
- 4.3.3. The Director, or his duly authorized representative, may conduct such other tests as he may deem necessary to evaluate air pollution emissions other than those noted in 4.1.6. [~~45CSR~~§~~2-8.1.c~~]
- 4.3.4. At such reasonable times as the Director may designate, the operator of any manufacturing process source operation may be required to conduct or have conducted stack tests to determine the particulate matter loading in exhaust gases. Such tests shall be conducted in such manner as the Director may specify and be filed on forms and in a manner acceptable to the Director. The Director, or his duly authorized representative, may at his option witness or conduct such stack tests. Should the Director exercise his option to conduct such tests, the

operator will provide all the necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment and the required safety equipment such as scaffolding, railings and ladders to comply with generally accepted good safety practices. [~~45CSR13, R13-1650CK and R13-2807T, 4.1.8~~ 4.1.13; ~~45CSR§7-8.1~~]

4.3.5. The Director, or his duly authorized representative, may conduct such other tests as he or she may deem necessary to evaluate air pollution emissions. [~~45CSR13, R13-1650CK and R13-2807T, 4.1.8~~ 4.1.13; ~~45CSR§7-8.2~~]

4.3.6. An initial performance test shall be conducted to determine if CO emissions from the Hot Oil Heater [C3T-F-1700] do not exceed the limitation specified in 4.1.19. The performance test for CO shall be conducted according to testing requirements specified in Table 4.3.6.

Table 4.3.6.: Carbon Monoxide (CO) Performance Testing Requirements.

<u>Step</u>	<u>Reference to be Followed</u>
<u>a. Select the sampling ports location and the number of traverse points.</u>	<u>Carbon Monoxide Method 1 in appendix A to 40 C.F.R. 60.</u>
<u>b. Determine oxygen and carbon dioxide concentrations of the stack gas.</u>	<u>Method 3A or 3B in appendix A to 40 C.F.R. 60, or ASTM D6522-00 (IBR, see 40 C.F.R. §63.14(b)), or ASME PTC 19, Part 10 (1981) (IBR, see 40 C.F.R. §63.14(i)).</u>
<u>c. Measure the moisture content of the stack gas.</u>	<u>Method 4 in appendix A to 40 C.F.R. 60.</u>
<u>d. Measure the carbon monoxide emission concentration.</u>	<u>Method 10, 10A, or 10B in appendix A to 40 C.F.R. 60, or ASTM D6522-00 (IBR, see 40 C.F.R. §63.14(b)) when the fuel is natural gas.</u>

[~~45CSR13, R13-1650K and R13-2807T, 4.3.2~~]

4.3.7. Following the initial performance test, annual performance tests shall be conducted to determine if CO emissions from the Hot Oil Heater [C3T-F-1700] do not exceed the limitation specified in 4.1.19. The annual performance test for CO shall be conducted according to testing requirements specified in Table 4.3.6. Each annual performance test must be conducted between 10 and 12 months after the previous performance test. [~~45CSR13, R13-1650K and R13-2807T, 4.3.3~~]

4.3.8. The permittee shall conduct performance tests for CO according to 40 C.F.R. §63.7(c),(d),(f), and (h). [~~45CSR13, R13-1650K and R13-2807T, 4.3.4; 40 C.F.R. §§63.7(c), (d), (f), and (h)~~]

4.4. Recordkeeping Requirements

4.4.1. *Record of Maintenance of Air Pollution Control Equipment.* For all air pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures. [~~45CSR13, R13-1650CK and R13-2807T, 4.4.2~~]

4.4.2. *Record of Malfunctions of Air Pollution Control Equipment.* For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or

operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction

[45CSR13, R13-1650C ~~K~~ and R13-2807T, 4.4.3]

- 4.4.3. For the purpose of demonstrating compliance with the monitoring requirements set forth in Section 4.2.1 of this permit, the permittee shall maintain monthly records of the production rates for each of the units identified in Table 4.1.1 of this permit. **[45CSR13, R13-1650C ~~K~~ and R13-2807T, 4.4.4]**

- 4.4.4. ~~For the purpose of demonstrating compliance with the monitoring requirements set forth in Section 4.2.2 of this permit, the permittee shall maintain monthly records of the fuel consumption rates for each of the Hot Oil Heaters (C2T-B-9001, C3T-B-1600, C4T-B-1600). These records shall include, but not limited to, the fuel type(s) and the associated daily average hourly and annual consumption rate during equipment start-up and routine operation. [45CSR13, R13-1650C, 4.4.5]~~

~~For the purpose of demonstrating compliance with the monitoring requirements set forth in Section 4.2.2. of this permit, the permittee shall maintain monthly records of the fuel consumption rates for each of the Hot Oil Heaters [C2T-B-9001, C3T-B-1600, C4T-B-1600, and C3T-F-1700] the Small Boilers [UGS-B-2010, UGS-B-4010, UGS-B-4011, UGS-B-3010, and UGS-B-3011], and the Space Heaters [UGS-B-1050, UGS-B-1060, UGS-B-1004, UGS-B-1005, UGS-B-1006, UGS-B-1007, UGS-B-4001, UGS-B-4002, UGS-B-4003, UGS-B-4004]. These records shall include, but not limited to, the fuel type(s) and the associated daily average hourly and annual consumption rate during equipment start-up and routine operation. [45CSR13, R13-1650C ~~K~~ and R13-2807T, 4.4.5]~~

- 4.4.5. For the purpose of demonstrating compliance with the monitoring requirements set forth in Section 4.2.3 of this permit, the permittee shall maintain monthly records of the pressure differential readings across the dust collection systems. **[45CSR13, R13-1650C ~~K~~ and R13-2807T, 4.4.6]**
- 4.4.6. Continuous process vents using a control or recovery device to comply with 4.1.15 shall comply with all applicable recordkeeping provisions specified for continuous process vents in 40 C.F.R. §§63.117 and 63.118 except for the differences noted in 40 C.F.R. §63.1315(a). The pertinent sections of 40 C.F.R. §§63.117 and 63.118 applicable to continuous process vents include the following:
 - a. The permittee shall keep up-to-date and readily accessible hourly records of whether the flow indicator specified under 4.2.4 [40 C.F.R. §63.114(d)(1)] was operating and whether a diversion was detected at any time during the hour, as well as records of the times and durations of all periods when the gas stream is

diverted to the atmosphere or the monitor is not operating.

- b. For a boiler or process heater, a description of the location at which the vent stream is introduced into the boiler or process heater shall be recorded.

[45CSR13, R13-1650~~CK~~ and R13-2807T, 4.4.7.1.1 and 4.4.7.1.2; 45CSR34; 40 C.F.R. §§63.1319(a), 63.1315(a), 63.117(a)(4)(i), 63.117(a)(4)(iii), and 63.118(a)(3)]

- 4.4.7. Owners or operators required to keep continuous records in accordance with 40 C.F.R. 63, Subpart JJJ shall keep records as specified in **40 C.F.R. §§63.1335(d)(1) through (d)(7). [45CSR13, R13-1650~~CK~~ and R13-2807T, 4.4.7.2; 45CSR34; 40 C.F.R. §§63.1315(d), (d)(1) through (d)(7), 63.1335(d)(1) through (d)(7)]**
- 4.4.8. The owner or operator of an affected source shall comply with the applicable recordkeeping and reporting requirements in 40 C.F.R. 63, Subpart A as specified in Table 1 of 40 C.F.R. 63, Subpart JJJ. These requirements include the requirements specified in 40 C.F.R. §63.1335(b)(1). **[45CSR13, R13-1650~~CK~~ and R13-2807T, 4.4.7.3; 45CSR34; 40 C.F.R. §§63.1335(b) and (b)(1)]**
- 4.4.9. The permittee shall maintain records of the NPDES permit (Permit No. WV0000132) parameters monitored in 4.1.18. **[45CSR34; 40 C.F.R. §63.147(b)(4)]**
- 4.4.10. The permittee shall comply with the requirements of 40 C.F.R. 63, Subpart H for equipment leaks, with the differences noted in 40 C.F.R. §§63.1331(a)(1) through (a)(13). The pertinent equipment leak recordkeeping provisions include 40 C.F.R. §63.181 (Recordkeeping requirements.). **[45CSR13, R13-1650~~CK~~ and R13-2807T, 4.4.7.4; 45CSR34; 40 C.F.R. §§63.1331(a) and 63.181]**
- 4.4.11. Copies of all applicable records and reports required by 40 C.F.R. 63, Subpart JJJ shall be kept for at least 5 years, as specified in 40 C.F.R. §63.1335(a)(1), with the exception listed in 40 C.F.R. §63.1335(a)(2). **[45CSR34; 40 C.F.R. §§63.1335(a)(1), and 63.1335(a)(2)]**
- 4.4.12. The permittee shall maintain records of the operating schedule and the quantity and quality of fuel consumed in Hot Oil Heaters C3T-B-1600 and C4T-B-1600. For fuel burning unit(s) which burn only pipeline quality natural gas, such records shall include, but not be limited to, the date and time of start-up and shutdown, and the quantity of fuel consumed on a daily basis. Such records are to be maintained on-site and made available to the Director or his duly authorized representative upon request. Where appropriate the owner or operator of a fuel burning unit(s) may maintain such records in electronic form. **[45CSR§§2-8.3.c and 8.3.d; 45CSR§§2A-7.1.a; 45CSR16; 40 C.F.R. §60.48c(g)]**
- 4.4.13. The permittee shall maintain records of the operating schedule and the quantity and quality of fuel consumed in Hot Oil Heater C2T-B-9001. For fuel burning unit(s) which burn only pipeline quality natural gas, such records shall include, but not be limited to, the date and time of start-up and shutdown, and the quantity of fuel consumed on a monthly basis. Such records are to be maintained on-site and made available to the Director or his duly authorized representative upon request. Where appropriate the owner or operator of a fuel burning unit(s) may maintain such records in electronic form. **[45CSR§§2-8.3.c and 8.3.d; 45CSR§§2A-7.1.a]**
- 4.4.14. The permittee shall keep readily accessible records for the CP4 EG Storage Tank (C4L-F-1800) showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. These records shall be kept for the life of the source. **[45CSR13, R13-1650~~CK~~ and R13-2807T, ~~4.1.11~~ 4.1.16 and 4.4.8; 45CSR16; 40 C.F.R. §§60.110b(a), 60.116b(a), and 60.116b(b)]**
- 4.4.15. The permittee shall monitor all fugitive particulate emission sources as required by 4.1.12 to ensure that a

system to minimize fugitive emissions has been installed or implemented. Records shall be maintained on site for a period of no less than five (5) years stating the types of fugitive particulate capture and/or suppression systems used, the times these systems were inoperable, and the corrective actions taken to repair these systems. **[45CSR§30-5.1.c.]**

- 4.4.16. The permittee shall maintain records indicating the use of any dust suppressants or any other suitable dust control measures as required by 4.1.13 applied at the facility. These records shall be maintained on site for a period of no less than five (5) years. **[45CSR§30-5.1.c.]**

4.5. Reporting Requirements

- 4.5.1. In addition to the reports and notifications required by 40 C.F.R. 63, Subpart A as specified in Table 1 of 40 C.F.R. 63, Subpart JJJ, the owner or operator of an affected source shall prepare and submit periodic reports as specified in 40 C.F.R. §63.1335(e)(6). All reports required by this subpart, and the schedule for their submittal, are listed in Table 9 of 40 C.F.R. 63, Subpart JJJ. All reports shall be sent to the Administrator at the appropriate address listed in 40 C.F.R. §63.13. If acceptable to both the Administrator and the owner or operator of an affected source, reports may be submitted on electronic media. **[45CSR13, R13-1650**~~CK~~ **and R13-2807T, 4.5.1.1; 45CSR34; 40 C.F.R. §§63.1335(e), (e)(2), (e)(6)]**
- 4.5.2. The permittee shall submit as part of the next Periodic Report required by 40 C.F.R. §63.1335(e)(6) the information specified in 40 C.F.R. §§63.146(d)(1) and (3) for process wastewater. **[45CSR13, R13-1650**~~CK~~ **and R13-2807T, 4.5.1.2; 45CSR34; 40 C.F.R. §§63.146(d), (d)(1) and (d)(3)]**
- 4.5.3. The permittee shall comply with the requirements of 40 C.F.R. 63, Subpart H for equipment leaks, with the differences noted in 40 C.F.R. §§63.1331(a)(1) through (a)(13). The pertinent equipment leak reporting provisions include 40 C.F.R. §63.182 (Reporting requirements.). **[45CSR13, R13-1650**~~CK~~ **and R13-2807T, 4.5.1.3; 45CSR34; 40 C.F.R. §§63.1331(a) and 63.182]**
- 4.5.4. If you have a Group 2 emission point that becomes a Group 1 emission point after the compliance date for your affected source, you must comply with the Group 1 requirements beginning on the date the switch occurs. An initial compliance demonstration as specified in 40 C.F.R. 63, Subpart FFFF must be conducted within 150 days after the switch occurs. **[45CSR13, R13-1650**~~K~~ **and R13-2807T, 4.1.17; 45CSR34; 40 C.F.R. §63.2445(d)]**
- 4.5.5. Notification of process change.
- a. Except as specified in paragraph 4.5.5.b, whenever you make a process change, or change any of the information submitted in the notification of compliance status report or a previous compliance report, that is not within the scope of an existing operating scenario, you must document the change in your compliance report. A process change does not include moving within a range of conditions identified in the standard batch, and a nonstandard batch does not constitute a process change. The notification must include all the information in 4.5.5.a.1 through 4.5.5.a.3.
- (1) A description of the process change.
- (2) Revisions to any of the information reported in the original notification of compliance status report under 40 C.F.R. §63.2520(d).
- (3) Information required by the notification of compliance status report under 40 C.F.R. §63.2520(d) for changes involving the addition of processes or equipment at the affected source.

- b. You must submit a report 60 days before the scheduled implementation date of any of the changes identified in 4.5.5.b.1, 4.5.5.b.2, or 4.5.5.b.3.
 - (1) Any change to the information contained in the precompliance report.
 - (2) A change in the status of a control device from small to large.
 - (3) A change from Group 2 to Group 1 for any emission point except for batch process vents that meet the conditions specified in 40 C.F.R. §63.2460(b)(6)(i).

[\[45CSR13, R13-1650K and R13-2807T, 4.1.17; 45CSR34; 40 C.F.R. §63.2520\(e\)\(10\)\]](#)

4.6. Compliance Plan

4.6.1. NA

5.0. Temporary Requirements to Re-condition Therminol T-66 Heat Transfer Fluid

- 5.1. No physical changes to the process equipment shall be made before or during the execution of these temporary permit conditions. [45CSR13, R13-2807T, 4.1.01 and 4.3.01]
- 5.2. These temporary permit conditions are no longer valid after March 15, 2010. [45CSR13, R13-2807T, 4.1.02 and 4.3.01; 45CSR§13-11.2]
- 5.3. Upon written request of the permittee and approval by the Secretary, these temporary permit conditions' expiration date can be extended an additional six (6) months from the expiration date (March 15, 2010). [45CSR13, R13-2807T, 4.1.03 and 4.3.01; 45CSR§13-11.2]
- 5.4. The permittee shall notify the Secretary in writing within fifteen (15) days of starting or prematurely completing work related to the temporary permit. A premature completion date would be a completion date occurring before the expiration date appearing in 5.2. [45CSR13, R13-2807T, 4.1.04 and 4.3.01; 45CSR§13-11.2]
- 5.5. Upon the completion or expiration in 5.2, the permittee shall report to the Secretary in writing within thirty (30) days any increases in actual VOC/HAP/benzene emissions that occurred during testing. [45CSR13, R13-2807T, 4.1.05 and 4.3.01 and 4.5.0; 45CSR§13-11.2]
- 5.6. The quantity of Therminol 66 (T-66) heat transfer fluid to be regenerated during this temporary permit shall not exceed 10,000 gallons. [45CSR13, R13-2807T, 4.1.06 and 4.3.01]
- 5.7. Emissions from the Hot Oil Heater (C2T-B-9001) (Emission Point 2P-9001) shall be limited to the pollutants and associated emission rates as revised for this temporary permit and presented in Table 4.1.6.c. - "CSS-7 Maximum Permitted Emissions". [45CSR13, R13-2807T, 4.1.07 and 4.3.01]
- 5.8. For this temporary permit, the permittee shall:
 - a. Measure and/or determine and record:
 - (1) The total amount of T-66 re-generated during the test.
 - (2) The hourly flow rate, the duration of flow in hours, and total flow rate/amount of nitrogen to T-66 Storage Tank (F-5001).
 - (3) The flow rate and amount of waste vapors burned in the Hot Oil Heater (C2T-8-9001) during the test.
 - (4) the hourly temperature of the T-66 in the T-66 Storage Tank (F-5001).
 - b. Pull samples from the T-66 Storage Tank (F-5001) and have these samples analyzed to determine the quantity of "low boilers" removed during the test.

[45CSR13, R13-2807T, 4.2.01 and 4.4.01]

5.0. — Boilers B-1010, B-1020, B-1030, and B-1040 Requirements

5.1. — Limitations and Standards

~~5.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average. [45CSR§2-3.1]~~

~~5.1.2. No person shall cause suffer, allow or permit the discharge of particulate matter into the open air from all fuel burning units located at one plant, measured in terms of pounds per hour in excess of the amount as determined as follows for Type 'b' fuel burning units:~~

~~B 1010: 80 MMBTU/hr * 0.09 lbs/MMBTU = 7.2 lbs/hr~~

~~B 1020: 60 MMBTU/hr * 0.09 lbs/MMBTU = 5.4 lbs/hr~~

~~B 1030: 60 MMBTU/hr * 0.09 lbs/MMBTU = 5.4 lbs/hr~~

~~B 1040: 30 MMBTU/hr * 0.09 lbs/MMBTU = 2.7 lbs/hr~~

~~[45CSR§2-4.1.b]~~

~~5.1.3. At all times, including periods of start-ups, shutdowns and malfunctions, owners and operators shall, to the extent practicable, maintain and operate any fuel burning unit(s) in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, visible emission observations, review of operating and maintenance procedures and inspection of the source. [45CSR§2-9.2]~~

~~5.1.4. No person shall cause, suffer, allow or permit the discharge of sulfur dioxide into the open air from all stacks located at one plant, measured in terms of pounds per hour, in excess of the amount as determined as follows for Type 'b' fuel burning units:~~

~~B 1010: 80 MMBTU/hr * 3.2 lbs/MMBTU = 256 lbs/hr~~

~~B 1020: 60 MMBTU/hr * 3.2 lbs/MMBTU = 192 lbs/hr~~

~~B 1030: 60 MMBTU/hr * 3.2 lbs/MMBTU = 192 lbs/hr~~

~~B 1040: 30 MMBTU/hr * 3.2 lbs/MMBTU = 96 lbs/hr~~

~~[45CSR§10-3.3.f]~~

~~5.1.5. Due to unavoidable malfunction of equipment or inadvertent fuel shortages, emissions exceeding those provided for in 5.1.4 may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty four (24) hours of the equipment malfunction or fuel shortage. In cases of major equipment failure or extended shortages of conforming fuels, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director. [45CSR§10-9.1]~~

5.2. Monitoring Requirements

~~5.2.1. For the purpose of demonstrating compliance with the opacity limit of 5.1.1 for Boilers B 1010, B 1020, B 1030, and B 1040, Method 22 visible emission observations shall be conducted monthly when the boilers are combusting No. 2 fuel oil. These visible emission observations shall be conducted during periods of normal operation for a sufficient time interval to determine if the unit has visible emissions. If the source has visible emissions, then a 40 CFR 60, Appendix A, Method 9 evaluation shall be conducted within twenty four (24) hours unless the permittee can demonstrate a valid reason that the time frame should be extended. A Method 9~~

~~evaluation shall not be required if the condition resulting in the excess visible emissions is corrected within 24 hours and the units are operated at normal operating conditions. [45CSR§2-3.2 and 45CSR§30-5.1.e.]~~

5.3. Testing Requirements

~~5.3.1. At such reasonable times as the Director may designate, the owner or operator of any fuel burning unit(s) may be required to conduct or have conducted tests to determine the compliance of such unit(s) with the emission limitations of 5.1.2. Such tests shall be conducted in accordance with the appropriate method set forth in the Appendix to 45CSR2 or other equivalent EPA approved method approved by the Director. The Director, or his duly authorized representative, may at his option witness or conduct such tests. Should the Director exercise his option to conduct such tests, the operator will provide all necessary sampling connections and sampling ports located in such manner as the Director may require, power for test equipment, and the required safety equipment such as scaffolding, railings and ladders to comply with generally accepted good safety practices. Sufficient information on temperatures, velocities, pressures, weights and dimensional values shall be reported to the Director, with such necessary commentary as he may require to allow an accurate evaluation of the reported test results and the conditions under which they were obtained. [45CSR§§2-8.1.b and 8.1.b.1]~~

~~5.3.2. The Director, or his duly authorized representative, may conduct such other tests as he may deem necessary to evaluate air pollution emissions other than those noted in 5.1.2. [45CSR§2-8.1.c]~~

5.4. Recordkeeping Requirements

~~5.4.1. The permittee shall maintain records of the operating schedule and the quantity and quality of fuel consumed in each fuel burning unit as specified in 5.4.1.a, 5.4.1.b, and 5.4.1.c. Such records are to be maintained on site and made available to the Director or his duly authorized representative upon request. Where appropriate the owner or operator of a fuel burning unit(s) may maintain such records in electronic form:~~

- ~~a. For fuel burning unit(s) which burn only pipeline quality natural gas, such records shall include, but not be limited to, the date and time of start up and shutdown, and the quantity of fuel consumed on a monthly basis.~~
- ~~b. For fuel burning unit(s) which burn only distillate oil, such records shall include, but not be limited to, the date and time of start up and shutdown, the quantity of fuel consumed on a monthly basis and a BTU analysis for each shipment.~~
- ~~c. For fuel burning unit(s) which burn a combination of fuels, the owner or operator shall comply with all applicable recordkeeping requirements for each fuel burned.~~

~~[45CSR§§2-8.3.c and 8.3.d; 45CSR§§2A-7.1.a, 7.1.a.1, 7.1.a.2, and 7.1.a.6]~~

~~5.4.2. Records of each visible emission observation and each Method 9 evaluation conducted in accordance with 5.2.1. shall be maintained on site for a period of no less than five (5) years and shall be made available to the Director or his/her duly authorized representative upon request. The visible emission observation records shall include, but not be limited to, the date, time, name of the emission unit, the applicable visible emissions requirements, the results of the observations, what action(s), if any, was/were taken, and the name of the observer. [45CSR§30-5.1.e.]~~

5.5. Reporting Requirements

~~5.5.1. The owner or operator of a fuel burning unit(s) subject to 45CSR2 shall report to the Director any malfunction of such unit or its air pollution control equipment which results in any excess particulate matter emission rate or excess opacity (i.e., 5.1.1 and 5.1.2) as provided in one of the following subdivisions:~~

~~a. Excess opacity periods meeting the following conditions may be reported on a quarterly basis unless otherwise required by the Director:~~

~~1. The excess opacity period does not exceed thirty (30) minutes within any 24-hour period; and~~

~~2. Excess opacity does not exceed 40%.~~

~~b. The owner or operator shall report to the Director any malfunction resulting in excess particulate matter or excess opacity, not meeting the criteria set forth in 5.5.1.a, by telephone, telefax, or e-mail by the end of the next business day after becoming aware of such condition. The owner or operator shall file a certified written report concerning the malfunction with the Director within thirty (30) days providing the following information:~~

~~1. A detailed explanation of the factors involved or causes of the malfunction;~~

~~2. The date and time of duration (with starting and ending times) of the period of excess emissions;~~

~~3. An estimate of the mass of excess emissions discharged during the malfunction period;~~

~~4. The maximum opacity measured or observed during the malfunction;~~

~~5. Immediate remedial actions taken at the time of the malfunction to correct or mitigate the effects of the malfunction; and~~

~~6. A detailed explanation of the corrective measures or program that will be implemented to prevent a recurrence of the malfunction and a schedule of such implementation.~~

~~[45CSR§§2-9.3, 9.3.a, 9.3.a.1, 9.3.a.2, 9.3.b, 9.3.b.1, 9.3.b.2, 9.3.b.3, 9.3.b.4, 9.3.b.5, and 9.3.b.6]~~

~~5.6. Compliance Plan~~

~~5.6.1. NA~~